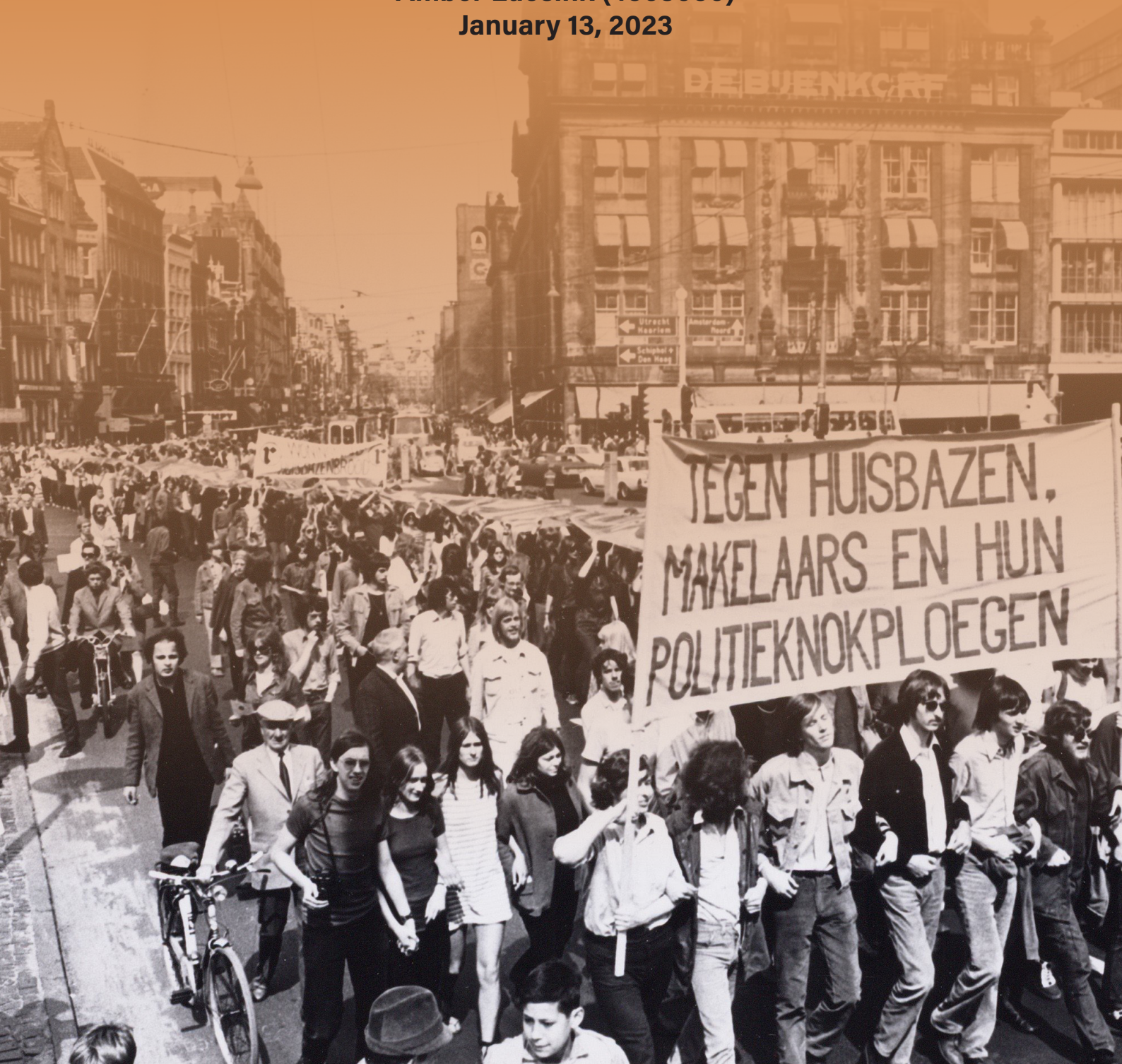# *The Revival of the Just City*

A planning & design methodology that allows steering complex urban development and contributes to the revival of the Just City that Amsterdam once was

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Abstract

Inequality in the city of Amsterdam is growing (Van Gent & Jaffe, 2017). Whereas Uitermark (2009) describes the city in the 1970s as a prime example of a Just City, Florida (2017) claims that the contemporary metropolis is growing as a city of the elite. Neoliberal planning in recent decades has focused on attracting knowledge workers to Amsterdam with a strategy of privatization, deregulation and decentralization (Van der Wouden et al., 2006). Not only has this led to a situation where access to the municipality for lower-income groups is compromised, but also to a complex development environment where democratic decision-making is vulnerable (Van Gent & Jaffe, 2017 & Taşan-Kok, 2010).

The problems of inequality and undemocratic decision-making in the Amsterdam region call for a new understanding of how to redesign for a Just City, in which spatial justice and inclusive decision-making is protected. Therefore, this thesis research proposes a refined methodology that enables understanding contemporary demands for spatial justice and translating these demands into spatial design. A framework is developed that provides an overview of planning and design principles that must be protected during the development of a Just City. Furthermore, a 5-Step Methodology is being created that urban planners may use to translate these principles into spatial designs. With these instruments, the research contributes to academic knowledge about planning for justice and steering complex urban development.

Although (spatial) justice is a value that may never be fully obtained and the fluid definition of a Just City is always evolving (Pellissier-Tanon & Moreira, 2007), the products of this research contribute to the political discourse on planning for justice and equity. The results may be further developed by integrating different academic disciplines and the perspectives of multiple stakeholders in its progress. Moreover, the performance of the methodology may be explored further by experimenting with it in a practical setting.

Keywords: Just City, spatial justice, Amsterdam, neoliberalism, complex urban development, urban planning & designing

Preface &
Acknowledgments

Welcome to my thesis report. Over the past year, I have been working on this report, exploring the research field of planning for spatial justice and equity. This work contributes to the research of the studio Planning Complex Cities of the Urbanism Department of TU Delft. It is the closing research of the master track Urbanism and aims to develop a new methodology from which Just Cities can be developed. The knowledge and skills I have developed over the past 6 years at TU Delft come together in this research and have resulted in a new and innovative approach to urban development. For this, I am grateful and proud.

During my graduation project I have been supported by my mentors Rodrigo Ordonhas Viseu Cardoso and Reinout Kleinhans and for that, I would like to thank them. I would also like to thank Robbert Jan van der Veen for his support during the first semester of the graduation year. My mentors guided me through the process and helped me understand the complex concept of a Just City. I learned a lot about developing methodologies and tools that can guide complex decision-making environments and about integrating different needs that come together in urban space. I enjoyed the process and collaboration with Rodrigo, Reinout & Robbert Jan.

Finally, I would also like to thank everyone else who has supported me over the past year. I have enjoyed the time together with the February graduation group and everyone else I have met at the Faculty of Architecture. Furthermore, I would like to thank everyone in my private environment for their support and help. A special thanks go out to Justin & Joycet.

I hope this report can be an inspiration to anyone who designs, plans, or uses public space. I strongly believe that if we work together to create spatially inclusive urban environments, a wonderful future awaits. That is what I dream of. Thank you for reading this report and contributing to it.

Amber Luesink

Table of Contents

1. Introduction

This chapter provides an introduction to the research area of this thesis and the problem it aims to solve. It provides a general introduction, from which the problem statement will subsequently be derived. Furthermore, the project aim will be explained, followed by the research questions and an derivation of the research location. In closing, an elaboration of my personal motivation will be provided.

Photo 3: ' Van Beuningenplein. Protest tegen de voorgenomen sluting van buurthuis Ons Huis'
(Stadsarchief Amsterdam/Busselman, F., 1984)

1.1 Introduction to the research field

Inequality in the city of Amsterdam is on the rise (Van Gent & Jaffe, 2017). Housing is increasingly becoming more unaffordable and public space is evolving to suit the needs of higher-income population. Gradually, the Dutch capital is becoming a theme park for the higher-educated citizens (Nu.nl, 2017) and the lower-income families are forced out towards the periphery. Spatial injustice is intensifying and not everyone can enjoy the high-quality amenities that Amsterdam offers. (Antonisse, 2021)

With expected population growth (CBS, 2019) and expected urbanization in the coming years, pressure on space will increase further in Amsterdam. The effect of this phenomena is a looming threat of further spatial injustice. Action has to be taken now to mitigate urban problems and restore the right to the city for all.

Ongelijkheid in Amsterdam groeit: "We moeten praten mét de mensen"

28 september 2021, 13.42 uur · Aangepast 28 september 2021, 14.00 uur · Door Robin Antonisse

Figures 1&2: News articles "Amsterdam theme park for higher-educated people" (nu.nl, 2017) and "Inequality is growing in Amsterdam: "We have to talk to the people" (Antonisse, 2021)

Photo 4: Impression of strikers movements in Amsterdam during the 1970s ("Keizersstraat 21 - 23 (ged). Op nummer 21 protesten tegen de sloop van de Nieuwmarktbuurt", Stadsarchief Amsterdam/ANEFO, 1971)

Amsterdam as Just City in the 1970s

Although the problems related to spatial justice in Amsterdam are deepening, this has not always been the case. The 1970s saw strikers movements protesting modernist plans. Communities gathered and formed a powerful force against the government. Eventually, the people were heard and the municipality took strict public control over the housing market. This resulted in a city where homes were accessible to all and where exclusion and alienation were absent. A strong sense of community maintained. (Uitermark, 2009)

In stark contrast to what the city experiences at present, Amsterdam was well-known as a "Just City". A Just City is generally described as one that protects spatial justice and democratic decision-making. Authors Uitermark (2009) and Fainstein (2011) considered the city in the time to be a prime model of a Just City in which values of democracy, equity and diversity were in right balance and accessible and affordable shelter was available for all.

Changing planning paradigm of the 90s

The Dutch urban planning environment has changed since the 70s, following a significant paradigm shift in the 1990s. During this period, neoliberalism grew and there was an enhanced focus on allowing the knowledge economy to flourish. Amsterdam wanted to connect with the globalizing industry and to do so it created a new strategy of privatization, deregulation and decentralization. Private parties were from now on involved in decision-making, and the housing market shifted from being under strict government control to being progressively sold off and privatized. (Van der Wouden et al., 2006)

The neoliberal planning paradigm flourished in the city of Amsterdam for a better part of two decades. A prominent example is the redevelopment of the Zuidas station area. Here the emphasis was on the attraction of international companies and knowledge workers to the city, which would allow the city to connect to metropolises such as London and Paris. Together with private parties a major business core with international allure emerged (Amsterdamse Raad voor de Stadsontwikkeling, 1997). Today, the area is criticized for not being inclusive and being too elitist (Majoor, 2014).

Average growth added value in % 2013 - 2018

Figure 3: The growth of the different professions within the Metropolitan Region Amsterdam between 2009 and 2017, showing that mainly knowledge-intensive professions have grown while other professions stayed behind (Metropolitan Region Amsterdam, 2020)

Photos 5&6: Change of the Javastreet between 2013 (upper picture) and 2021 (lower picture) (Google Maps, 2013 & 2021)

Current problems in Amsterdam

Metropoolregio Amsterdam (2020) indicates that the knowledge economy has indeed grown in recent decades and that overall prosperity has increased. However, it also shows that wealth has not been equally distributed among all occupations and population groups. Florida (2017) writes that many metropolises, including Amsterdam, have developed as "cities of the elite" and that neoliberal planning has led to urban exclusion of lower-income populations. Similarly, Uitermark (2009) argues that the just city that Amsterdam was in the 1970s, has rapidly disappeared and that urban justice is under attack.

Spatial & non-spatial problems
Today's urban planning involves various spatial and non-spatial problems. It's not only the housing market that shows urban exclusion. In addition, the organization of public space, city services, changing demographics and social indicators show how the city is transforming to suit the needs of the elite. The demands of lower-income residents, such as the presence of community centers, have disappeared from the streetscape (Movisies, 2020). In contrast, the functions for higher-income residents, such as terraces and cafes, are increasing (Datlinq, 2020). Trust in governance on the periphery of the city is low and social cohesion is shrinking (Gemeente Amsterdam, 2022).

Complex decision environment

But the paradigm shift has not only led to more problems in the urban environment, the underlying development system is also experiencing difficulties. Privatization, deregulation and decentralization have led to greater private involvement in urban planning and have made development more complex. This has created opportunities because private parties have great (financial) capabilities and good use of these can lead to more quality places (Adams & Tiesdell, 2012). Nevertheless, with private actors involved, there are diverse interests and it is often more difficult to meet all their needs. Government has been replaced by governance and property-led development is often leading (Taşan-Kok, 2010). In addition, planning is replaced by project-based development and municipalities more frequently have a negotiating role rather than a leading position. In conclusion, while the introduction of private parties into the negotiation process offers opportunities, practice shows that the current approach leads to an undemocratic and finance-based reality (Taşan-Kok, 2010).

Figure 5: Impression of private parties joining the complex urban development system (Own figure, based on knowledge of Taşan-Kok, 2010)

Why we can't go back

Though it all may seem like a suitable solution to return to the Just City planning environment of the 1970s, there are many shortcomings to the development approach of that period. These flaws primarily relate to sustainability, but the housing lacked some degree of quality as well. For instance, there was significant anonymity and little consideration given to the development of qualitative public spaces (Bakker, 2013). Housing was by no means developed sustainably or climate-adaptively, and topics such as circularity were not yet widely supported. During the period when Amsterdam was known as Just City, housing was developed by the state, but on the cheap without many high standards (Bakker, 2013). Today, we are more aware of the importance of sustainable and qualitative constructions, and reverting to the development style of the 1970s would not establish today's requirements for successful development.

Photo 7: Impression of building style during the 1970s in Amsterdam ("Luchtfoto Bijlmer-Centrum", Stadsarchief Amsterdam, 1973)

The clarified information reveals the complex field of research that this thesis addresses. Amsterdam is facing problems regarding spatial justice and equity and this contrasts to how it was at some point in the past. In the 1970s, the city was known as a Just City in which affordable housing was available to all and the public authorities put citizens' priorities into action. A paradigm shift in the 1990s introduced private actors into the development process and made it more complex. Whilst in theory this offered opportunities for creating qualitative and successful places, in reality it led to property-led development and reduced power of public actors and citizens. Going back to the planning system of the 1970s is not a solution either, as this system did not meet the contemporary requirements concerning sustainability and identity.

The contemporary Just City

The above abstract raises the questions "What does the contemporary Just City look like?" and "What requirements should the contemporary Just City fulfill?" Additionally, it seeks a methodology that enables planners and citizens to make sense of the complex concept of the Just City and steer the (just as complex) decision-making environment into the path of a Just City.

This accounts for the purpose of this research. The objective is to establish a methodology that enables planners and citizens to comprehend the complex concept of a Just City. Models which allow an understanding of all the different requirements of a Just City (democracy, identity, sustainability, etc.) but are also adaptable to future changing demands, will be constructed. The models help to guide complex decision-making to achieve spatial justice and equity. The research aims for the establishment of a new strategy to restore the Just City of Amsterdam.

1.2 Problem statement

Problem statement
The problem field demonstrates the urgency for a new understanding of the Just City concept and the need for a new methodology. The problem statement below summarizes the problems Amsterdam faces today.

Neo-liberal ideologies have caused the Just City of Amsterdam to disappear. Spatial inequalities in the city rise and the complex decision-making environment of Dutch urban planning threatens democratic decision-making. A new understanding of planning for a Just City within the current complex context is called for, such that the Just City of Amsterdam can revive in a contemporary form.

Figure 6 provides a visual illustration of the problem statement. It shows that the changed planning paradigm of the 1990s has generated a situation where the complex planning environment has led to a city in which spatial justice is at risk.

1.3 Project aim

The goal of this project is to develop models that assist in understanding the concept of a Just City and enable urban planners to translate this concept into action. The research seeks to create a strong methodology that enables shaping the contemporary Just City and reaching favorable decisions for it, within the present complex context.

This research targets to obtain a comprehensive understanding of how to design and plan a Just City, while simultaneously developing models that translate this notion into physical design. The research adds to the knowledge gap on designing for spatial justice and to an overall strategy for the city of Amsterdam. Moreover, the research in this report can also be applied to urban areas outside Amsterdam and even outside the Netherlands.

Note: The objective of the project is to develop a Just City. As the definition on page 26 will also emphasize, this focus is on the spatial component of a Just City. Other disciplines such as economics and education are considered here, but not as primary goals.

1970s/80s: Amsterdam as Just City

Government control

1990s:
Neoliberal Paradigm Change

Strategy

Deregulation

Privatization

Decentralization

Complex planning environment

Now: Equality under pressure

Figure 6: Visual illustration of problem statement

Problem Statement

1970s/80s: Amsterdam as Just City

Government control

1990s:
Neoliberal Paradigm Change

Strategy

Deregulation

Privatization

Decentralization

Complex planning environment

Now: Equity under pressure

Solution

Aim

Just City Methodology

What makes a Just City and how can we plan for it again within the existing complex context?

Figure 7: Visual illustration of research aim

1.4 Research questions

Below is the main research question that will be answered in the thesis, along with the sub-questions that stem from it. Following each sub-question is the chapter that answers the question.

What are the key elements of a **methodology** that allows spatial planners and designers to grasp the concept of a **Just City** and to develop concrete **planning and design strategies** that contribute to **the revival of the Just City in Amsterdam**?

1. What made Amsterdam a **Just City** and how did a paradigm change make the Just City disappear? (Chapter 3)

2. What are the current problems regarding spatial justice in Amsterdam that make us **seeking for the Just City again**? (Chapter 3)

3. Which problems arise in the planning process, how is it organized and what can we learn from existing neoliberal developments? (Chapter 4)

4. What frameworks and models are included in a **methodology** that allows to grasp the concept of a Just City and plan and design for it? (Chapter 5)

5. How can a new methodology result in concrete **planning and design strategies** that allow the Just City of Amsterdam to revive? (Chapter 6 & 7)

Figure 8: Research Questions

1.5 Location

The location on which this research concentrates is the City of Amsterdam It constitutes the starting point of the thesis, and examining the issues in the city provides the input for establishing a new methodology. This location was chosen because the city of Amsterdam was once known as a Just City (Uitermark, 2009). Researching the way this condition has vanished and how troubles related to spatial justice have arisen provides valuable input to the methodology.

The methodology developed in this report is applicable to a wide range of urban (re)developments in the Netherlands and around the world. However, the methodology must be made context-specific and adapted to the needs of local stakeholders for each development. Since Amsterdam was taken 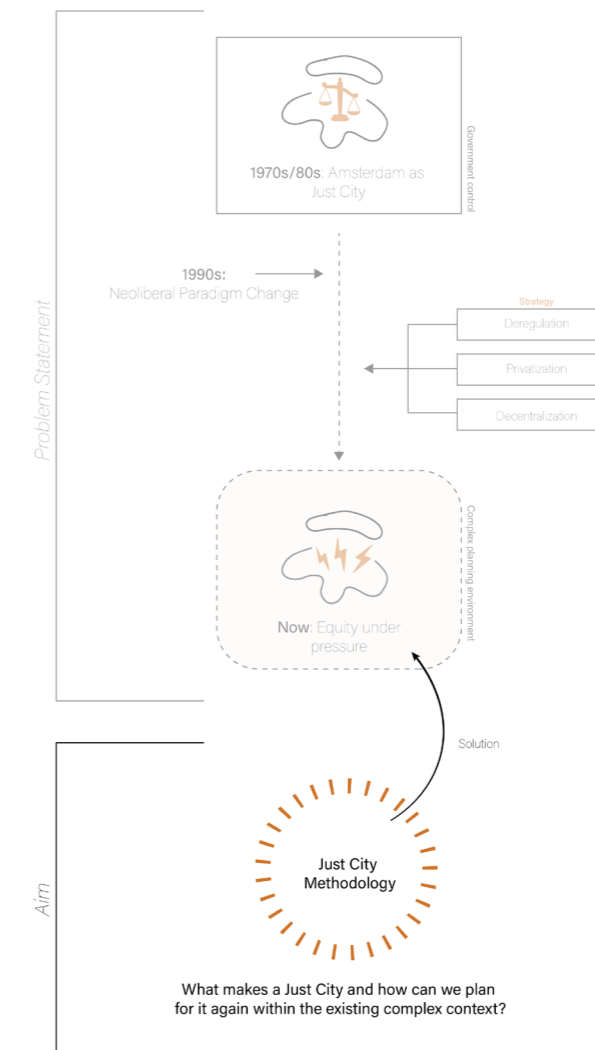as the study field, the methodology is most applicable to this location. Applying the methodology here would likely require fewer adjustments than in other locations.

Finally, the metropolis was also selected as a research location because it still experiences less inequality than other cities in Europe, such as London and Paris (van Gent & Jaffe, 2017). Amsterdam's basic urban conditions provide opportunities to revive the Just City. Hence, by centering this city as a project location, the city becomes a model for other cities in Europe and can once again serve as a source of inspiration.

The illustration presented below shows the role of Amsterdam as a project location in this graduate research. It provides input for creating a methodology that is generally applicable to any urban development in the world. Still, it is ideally suited for Amsterdam and by applying it there, the city can again become a model for other (European) cities.

Just City Methodology

Methodology applicable on every location in the world, but mostly Amsterdam

Collecting knowledge from past developments in the city

City as as inspiration for the future

Amsterdam as research location

Amsterdam as example on the horizon

Past — Now — Future

Figure 8: Role of Amsterdam in the research

1.6 Personal motivation

Personal motivation
This research fits well with my personal interests and motivation as an urbanist. In the following, I explain why this field interests me and why I chose it as a topic.

In 2020, I began my master's degree in Urbanism at TU Delft. Since then, I have had a keen interest in creating sustainable and livable urban areas, both on a large and small scale. Until now, I have mainly focused on creating environmental sustainability. I have undertaken projects addressing enhancing biodiversity, climate adaptive design and future-proof food systems. The topic of social sustainability has always been a component of these projects, but never as the main area of research. For that reason, my interest in spatial inclusivity and equity has grown and my motivation has emerged to expand my knowledge about this form of sustainability.

During this thesis, I will be developing my knowledge about social sustainability. I intend to improve my skills in integrating different interests and demands in urban development and creating instruments that guide the development process. As well, in doing so, I will focus more on the planning dimension of urban development, rather than the spatial design aspect.

Finally, this topic was chosen not only to develop my skills as an urban planner, but also has a strong connection to my personal interests. The topic of (spatial) inclusivity has always been important to me and I aim to learn more about this on a personal level. I want to know how I can contribute to creating more inclusive societies and what my role could be in this.

2. *Research understanding*

Chapter 2 provides the methodological background to this study. It opens with a brief overview of existing knowledge in the field, highlighting the scientific and social relevance of this research. In addition, key terms used in the report are explicated and defined. These definitions will clarify the subsequent conceptual framework. Subsequently, an overview of the thesis will be provided using a research framework. Here, the trajectory of the thesis will be clarified and the goals of the various stages of the process will be defined. The research framework will be followed by the methods used in the report. These will be explained in more detail in the methods framework. Finally, the timeline of the trajectory will be outlined.

Photo 8: 'Stadsdeelraad Zuid. Protest tegen de bouw van koopwoningen'
(Stadsarchief Amsterdam/Busselman, F., 1991)

As mentioned in the introduction, the neoliberal planning paradigm of the 1990s does not meet the contemporary needs of a Just City environment (Uitermark, 2009), but neither is the solution to go back to the planning system that Amsterdam had in the 1970s. Although the city was known as Just City during this period, there was little consideration of issues such as sustainability and protecting the human scale (Bakker, 2013). Therefore, it is important to create fresh instruments that allow us to grasp the contemporary concept of a Just City and give it new significance. The following explains why this contributes to one or more knowledge gaps, what other authors have written about it, and why it is scientifically and socially relevant.

Knowledge gaps

This thesis research contributes to two knowledge gaps in scientific research. It addresses the knowledge gap of how to plan for a Just City, while also adding to an even wider knowledge gap of planning with complexity. The following is an elaboration of these knowledge gaps.

Planning for a Just City
Several authors have written about the Just City as a concept. While Fainstein (2011) and Uitermark (2009) dared to propose a specific definition of a Just City, Griffin (2018) and Rocco et al. (2021) emphasized the difficulty of such a definition, demonstrating the complexity of capturing the concept of a Just City. Although attempts have been made to give meaning to the concept, no author has succeeded in creating a methodology by which urban planners can create an inclusive understanding of the concept and translate it into concrete actions. Therefore, by concentrating on creating tangible models and tools from which concrete actions emerge, this research contributes to the knowledge gap on planning for an Just City.

Planning with complexity
There are also numerous authors that write about urban complexity and the need to capture and manage it, but do not know exactly how. Adams & Tiesdell (2012) expound on the challenge of bringing different demands and stakeholders together in urban decision-making and integrating different disciplines involved in urban development. Taşan-Kok (2010) explains that complex urban decision-making today does not lead to the most desirable outcomes for public actors and citizens. This demonstrates that the complex environment creates undesirable conditions and that there is a knowledge gap in how to manage this process and how public actors can maintain power over development. A deeper understanding of how to steer development toward an Just City would add to the scientific knowledge of how to capture complexity and steer a process.

Scientific relevance

The explanation of the knowledge gaps shows the scientific relevance of this thesis research. By contributing to the existing knowledge gaps and being able to grasp the concept of a Just City, a contribution is being made to scientific research.

Societal relevance

The social relevance of this project is great. The following explains the importance of spatial justice for society. It also elaborates on what will happen if we do nothing and how the research contributes to the United Nations Sustainable Development Goals (n.d.).

The importance of spatial justice
Although not everyone is directly affected by spatial injustice, it is relevant to all populations in a city. Jones (2009) explains the importance of spatial justice for every city resident. Not only is it from a moralistic point of view important to establish fair systems, spatial justice also leads to sustainable systems, promoting economic growth and increased well-being for all. Likewise, urban equity leads to social cohesion and a safe environment for everyone. Finally, spatial injustice leads to polarization and political disruption. This also highlights the importance of (spatial) justice for public safety. (Jones, 2009)

In conclusion, spatial justice is highly relevant to the general well-being of all city dwellers. Perhaps some actors do not see the relevance or even benefit from the injustice. Nevertheless, even for them, it is important to protect equity.

What if we do nothing?
In the Netherlands, and especially in Amsterdam, the population is expanding (CBS, 2019). Together with a shortage of housing in the city and existing problems in spatial justice, this leads to a growing conflict for available space. The system in which a city of the elite can emerge, together with a scarcity of free space, will lead to further exclusion of people. With the trend of population growth, the challenges in Amsterdam will only get worse, and without doing something, the scarcity of space will lead to increasing inequality. Therefore, it is important to intervene in both urban space and the planning system to ensure access to the city for all.

The graph below shows the population growth of Amsterdam. If the Just City is not being protected now, Amsterdam will grow as "city of the elite" (Florida, 2017).

Figure 9: Expected population growth for the 4 biggest cities in the Netherlands (CBS, 2019)

Contribution to Sustainable Development Goals
The United Nations developed 17 Sustainable Development Goals for the 2030 Agenda for Sustainable Development (United Nations, n.d.). These goals emphasize the need for action to create a sustainable future worldwide. The 17 goals represent the various areas where action is needed and focus on environmental, social and economic sustainability. The project in this report contributes indirectly to all 17 Sustainable Development Goals, but targets specifically the following:

Figure 10: Sustainable Development Goals where the thesis contributes to (United Nations, n.d.)

In order to comprehend the research approach, some important terms need to be defined. Some of these terms relate to the outcome of this research and help to understand what this research is intending. Others bring information about general terms that often recur throughout this report.

Just City

As mentioned, the complexity of contemporary urban planning and the different demands for urban space, make it difficult to grasp the concept of a Just City and give a definition to it. Nevertheless, several authors aimed to provide one. Fainstein (2011) defines a Just City as "a city that has made the right trade-offs between equity, diversity and democracy," and Uitermark (2009) adds, "A Just City, in my opinion, is a city where exploitation and alienation are absent" (p. 350).

While Fainstein (2011) and Uitermark (2009) dared to provide a definition 10 years ago, recent authors like Griffin (2018) and Rocco et al. (2021) underline that citizens create their own definition of a Just City and that there is no single general definition. Griffin (2018) did create several Just City Values in an attempt to capture the concept, but did not want to provide a fixed definition. Similarly, Rocco et al. (2021) did not provide a definition but sought to capture the concept in different principles.

This thesis neither follows a fixed definition of a Just City. It recognizes the importance of citizens being able to shape the concept themselves and considers the notion as flexible. It concentrates on creating principles and values that contribute to the formation of a Just City, but emphasizes that it is not fixed and defined, but changeable and adaptable to each specific context.

Although there is no set definition of a Just City in this thesis, it must be said that the concept focuses mainly on the spatial components of a Just City. Other disciplines such as economics, education and civil rights are taken into account but are not given the main attention. The integration of these disciplines is considered as a recommendation for further product development.

Methodology

This research aims to create a methodology that allows us to understand the concept of a Just City. To this end, it is necessary to define the word "methodology". Jonker & Pennink (2010) define methodology as "the way a researcher conducts research. It is the way he chooses to deal with a particular set of questions" (p. 17). This often involves a set of rules, methods, procedures and principles that assist in addressing a particular problem.

The definition of Jonker & Pennink (2010) will be taken as a reference for the definition of the word 'methodology' in this thesis research. The word is defined as:

"A methodology is a set of rules, methods, procedures, and principles which provide a researcher the tools to deal with a particular question"

Complexity

The introduction explained the current complex planning environment. To properly understand this idea, a definition of "complexity" is needed that allows the reader to understand what this research aims to do.

Various authors give different definitions of the term "complexity." Standish (2008) says that "complexity has something to do with our ability to understand a system or object - we understand simple systems, but not complex ones" (p. 1). Complexity in this sense is related to experiencing tasks and issues as difficult. Adams & Tiesdell (2012) elaborate on the use of the word complexity in urban planning. They relate complexity to the many disciplines that come together in urban development, and the many stakeholders and interests that come together.

In this thesis, complexity is both focusing on the many disciplines that come together in urban development as the many stakeholders and interests. Hereby, complexity is being used in two ways with two different interpretations:

"Complex urban development relates to the difficulty of grasping the many disciplines and aspects that come together in the urban form"

"Complex decision-making refers to the difficulty of bringing stakeholders and their interests together in the urban development process"

Spatial justice

This report is strongly connected to the term spatial justice. The literature brings different definitions of this term. Philippopoulos-Mihalopoulos (2014) defines spatial justice as "a new theory and radical application of the material connection between space - both in a geographical and sociological and philosophical sense - and law - in the broadest sense that includes written and oral law, but also embodied social and political norms" (p. 2). The writer specifies this by calling spatial injustice "the struggle of different bodies - human, natural, nonorganic, technological - to occupy a given space at a given time" (p. 2).

Rocco et al. (2021) emphasize spatial justice as "the uphold of democratic values while improving equity and inclusion within and between urban networks" (p. 165). Hereby, there is a focus on creating inclusive and equal urban designs while also developing a democratic decision-making process.

This research focuses on developing a strategy that supports the creation of spatial justice in Amsterdam. It has a strong spatial component, but also a strong organizational component, the term of which also needs a definition. Therefore, the definition of Rocco et al. (2021) is the most comprehensive for the proposition used in this report.

"Spatial Justice is the uphold of democratic values, while improving equity and inclusion within and between urban networks"

Neoliberal planning

The term neoliberalism refers to the changed planning paradigm of the 1990s in Amsterdam. Cologne and Kroeze (2021) define neoliberalism as "a combination of a more restrictive role for the state, as well as a revaluation of free trade and a greater role for market forces" (p.4). Neoliberal planning in this thesis is based on the same principle, but applied mainly to spatial development. This research often relates to the underlying planning paradigm in which the focus is on attracting knowledge workers to Amsterdam and growing the knowledge economy. Therefore, neoliberal planning is defined as:

"Neoliberal planning is defined as urban planning in which there is a more restrictive role for the state, as well as a greater role for market forces, with the goal of allowing the knowledge economy to grow and creating agglomeration"

2.3 Conceptual framework

The conceptual framework illustrates and summarizes the purpose and structure of this thesis. It visualizes the problem field in which the problem statement is presented. This problem statement shows that the just city has disappeared from the 1970s and that this has led to inequality and spatial injustice in the city. It has also resulted in the current field of conditions showing a complex planning environment. These conditions create opportunities for the development of successful places, but currently it mainly leads to property-led urbanism and there is often no proper integration of complexity. Finally, there is also an opportunity field that identifies opportunities for further development. Population growth creates a need for urban (re)development and an opportunity exists to develop in such a way that the contemporary Just City can be revived.

In the middle of the diagram is the goal of the project. This shows that the goal is to develop an integrated methodology for the city of Amsterdam. This methodology responds to the other fields by learning from the past (the problem field), guiding current affairs (the complex planning environment of the condition field), and contributing to the future (the opportunity for the revival of the contemporary Just City). It integrates all the requirements that make a Just City, and the circle of arrows illustrates that it is not a fixed strategy, but can continue to evolve and adapt over time to changing demands.

Problem

Disappearance Just City

Cause

Effect

Changed planning paradigm

Growing inequality & spatial injustice

Motive
Big City Narrative
Neoliberalism

Strategy
Privatization
Deregulation
Decentralization

Just City values under pressure

Complex Planning Environment

Implies

+ Financial capacity & support

Challenge to integrate complexity

Property-led development

Condition

Learning from the **past**

Steering the **current**

Integrated methodology & strategy for Amsterdam

Contribute to the **future**

Expected population growth

Urban (re)development

Revival of the contemporary Just City

Opportunity

2.4 Research framework

Tthe research framework reflects the design of this study. It illustrates the purpose of the research and from here, the first phase flows. The focus of this phase is extensive research. This study consists of historical analyses, data analyses, literature analyses and stakeholder analyses. From these, information is extracted about what made Amsterdam a Just City in the 1970s and the issues facing the city today. The output of this phase provides a set of requirements that are key to a Just City environment and leads to an overview of planning and design principles. This output forms the input for the second phase, which is the design phase.

The design phase translates the planning and design principles into a methodology that allows one to capture the concept of a Just City and translate it into a concrete strategy. This methodology constitutes one of the final results of this thesis. In the design phase, also an elaboration of the methodology is given showing how the methodology may be used in practice. From here, statements are made about why certain planning and design typologies do or do not contribute to establishing a Just City environment. The end products of the design phase are the methodology, an overview of design typologies with an explanation of why they do or do not contribute to creating a Just City and a design of the process (based on the methodology).

The final stage includes a reflection on the research process and the products. A conclusion is provided about the research and the research question is answered. A reflection on the results is presented and limitations are explained so that recommendations for further research emerge.

Figure 12: Research framework

2.5 Expected outcomes

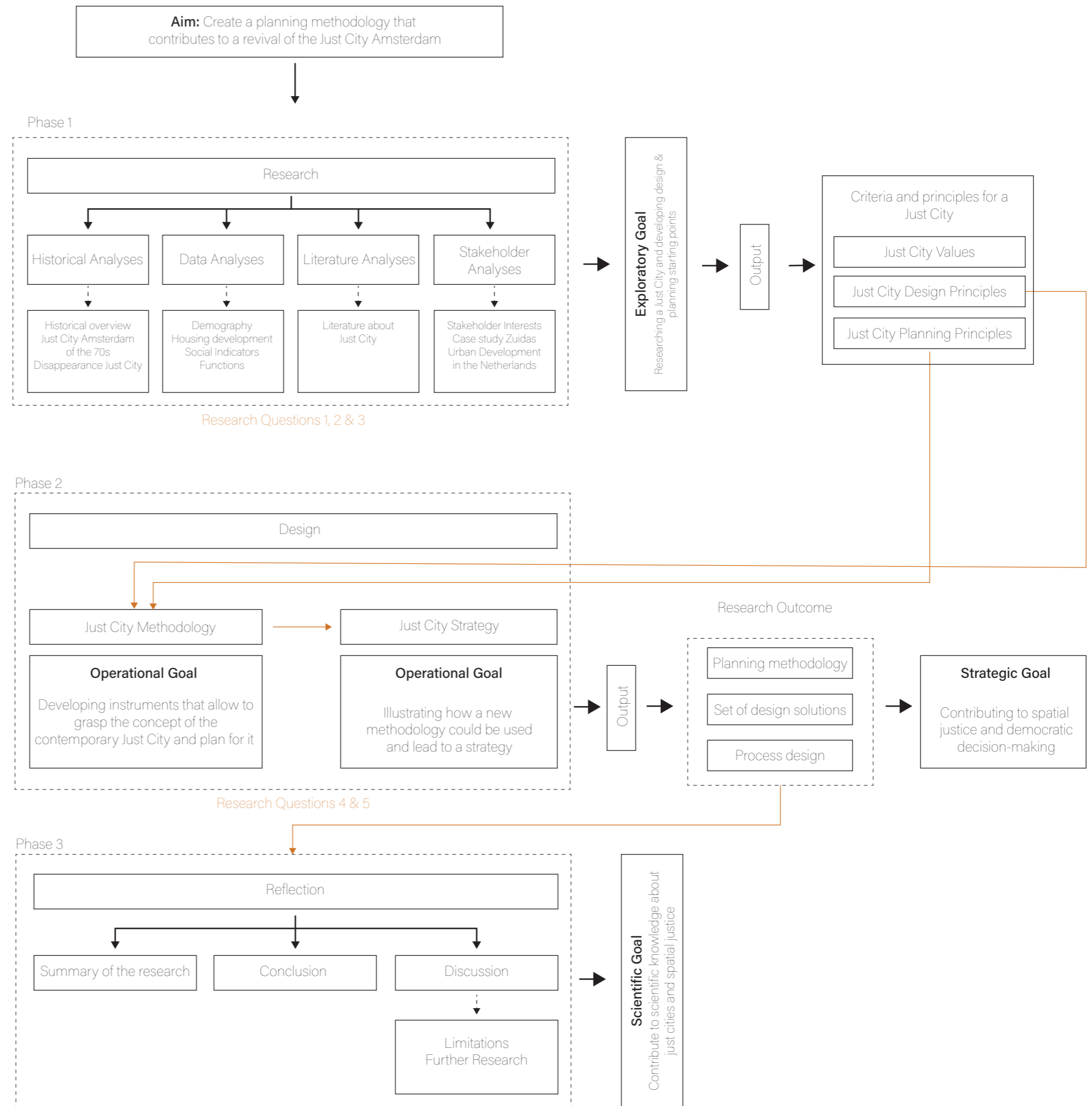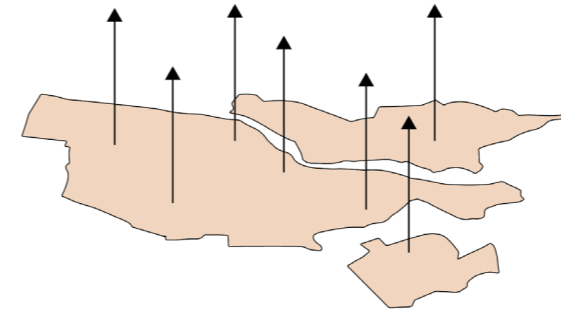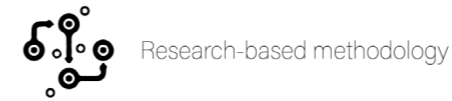The research framework has already shown the output of the research, but in addition, a comprehensive overview of the expected results is provided.

Research-based methodology

1. Just City Methodology

The most important expected outcome is the methodology. It includes new models and procedures that allow to plan for a Just City. Knowledge from the analyses phase that derives from researching the city of Amsterdam, lands in the creation of tangible products.

The main objectives of the methodology, are:

1. Grasping the concept of a Just City and understanding the requirements that belong to it

2. Develop a step-by-step procedure that enables planning for a Just City

3. Creating an assessment model from which spatial and non-spatial interventions can be measured

Suitable design solutions for the creation of a Just City

2. Model of design solutions that contribute to the creation of a Just City

The second expected outcome is an overview of design solutions that contribute to the creation of a Just City environment. The creation of design typologies provides input for the design process, anywhere in Amsterdam or in the world.

The main objectives of the design model, are:

1. Contribute to theoretical knowledge of designing for a Just City

2. Providing practical design input to steer future urban (re) development projects into the direction of a Just City

3. Illustrating how a new methodology can restult into tangible design typologies and how it can be applied in practice

Planning solutions & governance strategy

3. Model of planning solutions & a planning strategy

The final expected outcome of this thesis is the development of a planning & governance strategy. This outcome provides input of how to do governance that stimulates a Just City environment and plans for justice.

The main objectives of the planning & governance strategy, are:

1. Contribute to theoretical knowledge of inclusive governance and participatory planning

2. Providing practical input for urban planners and decision-makers on how to steer the development process in the direction of a Just City

3. Illustrating how a new methodology can result in tangible planning typologies and how it can be applied in practice

Figure 13-15: Expected research outcomes

2.6 Research methods

To come to the expected outcomes described on the previous pages, different methods will be applied in this research. Below, the different methods are explained and their goals are given.

Literature Research
Method: Literature research will be used to gain an understanding of the existing knowledge in the research field. The literature will help to understand the existing knowledge better and create new insights about this. From here, also new planning and governance principles will emerge. The used literature consists of scientific papers, books, and government strategies.

Goal: Create an understanding of the existing knowledge about Just Cities and the existing situation in Amsterdam.

Expected outcome: the development of planning and design principles

Historical Analyses
Method: Historical analyses is being done to gain more understanding of how Amsterdam developed so far and why it used to be known as a Just City in the 1970s. This knowledge will be used in order to create planning and design principles for the contemporary Just City and will therefore contribute to the creation of a Just City Methodology.

Goal: Develop an understanding of how Amsterdam developed and what made Amsterdam a Just City in the 1970s.

Expected outcome: planning and design principles that contribute to a new methodology

Data Analyses
Method: Data analyses will be used to develop insights into the current problems regarding spatial justice in the city of Amsterdam. By collecting data, knowledge about the city will be provided, in order to develop design and planning principles for the new methodology. Important sources for the data collection will be open data from the municipality, the CBS, or PDOK.

Goal: Create factual knowledge about the problems in the city of Amsterdam.

Expected outcome: An overview of the Amsterdam metabolism and the development of planning & design principles.

Stakeholder Analyses
Method: Stakeholder Analyses will help to develop knowledge about the modern complex decision-making in the city of Amsterdam. Within this complex development, there are many actors involved and stakeholder analyses will help to gain an understanding of the interests of these actors and the collisions that occur. This knowledge will be developed through different frameworks, for example, the power-interest matrix.

Goal: Gain insight into the complex development system of the Netherlands and Amsterdam in general.

Expected outcome: Planning and design principles as input for the Just City methodology.

Reference Research
Method: Reference research is an effective tool in order to gain knowledge about what is already done in the world and in Amsterdam and what can be learned from that. It can be projects that are positive and inspiring or projects that are negative and an example of how it shouldn't be. The references will contribute to the development of planning and design principles for the Just City methodology.

Goal: Creating understanding about what has already been done in the world and in Amsterdam specifically

Expected outcome: An overview of options, planning and design principles.

Integration
Method: When analyses have been done, the conclusions need to come together in a methodology. This will be done by integration. Here, different values and principles will come together and be integrated into one comprehensive methodology. By integrating, the concept of a Just City can be grasped and well understood.

Goal: Integrating different conclusions and observations into one readable and inclusive methodology

Expected outcome: An inclusive and comprehensive methodology that allows grasping the concept of a Just City.

Assessment
Method: The Just City Methodology will be one of the outcomes of this thesis, but will also function as usable tool for the creation of a design and planning strategy. By assessing certain solutions constantly, a well argumented and optimized design and planning strategy will arise. Assessment will therefore constantly be used to gain an understanding of how certain spatial and organizational interventions contribute to the creation of a Just City.

Goal: Creating understanding about whether and how certain interventions contribute or not to the development of a Just City

Expected outcome: An overview of suitable solutions for different planning and design themes with an argumentation of how it contributes to the development of a Just City.

Optimization
Method: The method of optimization will be used for the design of the planning and governance strategy. Here, an optimized design for the development process will be created, such that the decision-making process contributes again to democratic and bottom-up development. This method will gain information about how to translate abstract planning and design principles into a concrete process design.

Goal: Creating an optimized development process that contributes to the realization of a Just City.

Expected outcome: A proposed process design that allows a Just City to be developed.

2.7 Methods framework

What are the key elements of a **methodology** that allows spatial planners and designers to grasp the concept of a **Just City** and to develop concrete **planning and design strategies** that contribute to **the revival of it in Amsterdam**?

	Literature research	Historical analysis	Data analysis	Stakeholder analysis	Reference research	Integration	Assessment	Optimization
1. What made Amsterdam a Just City and how did a paradigm change make the Just City disappear?		●		●				
2. What are the current problems regarding spatial justice in Amsterdam that make us seeking for the Just City again?	●		●					
3. Which problems arise in the planning process, how is it organized and what can we learn from existing neoliberal developments?	●	●		●	●			
4. What frameworks and models are included in a methodology that allows to grasp the concept of a Just City and plan and design for it?	●					●		
5. How can a new methodology result in concrete planning and design strategies that allow the Just City to revive?	●			●			●	●

● Used to answer the research question

● Much used to answer the research question

● Very much used to answer the research question

Figure 16: Methods framework

2.8 Timeline

		February				March				April				May				June			Summer		September					Octobre				Novembre				Decembre				January		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
										P1									P2													P3					P4							P5

Problem definition

- Defining problem field
- Problem statement
- Research question

Research & Analyses

- Literature research
- Historical analyses
- Data analyses
- Stakeholder analyses
- Case-study research
- Development planning methodology

Design & Planning

- Design typologies development
- Assessment of design typologies
- Creation Design Typologies Assessment Model
- Planning typologies development
- Assessment planning typologies
- Design of a planning strategy

Reflection & Conclusion

- Concluding
- Reflecting
- Limitations & Further fesearch

Report

- Working on report

Figure 17: Timeline

3. Context

This chapter aims to gain an understanding of the current context of the city of Amsterdam. An overview of the city's past development is given, followed by an analysis of current problems. Subsequently, the need for a new strategy is explained. The emphasis of this chapter is on learning why Amsterdam enjoyed the status of a Just City in the 1970s, how that disappeared and what problems occured.

The research questions that will be answered in this chapter are:
1. What made Amsterdam a Just City and how did a paradigm change make the Just City disappear?
2. What are the current problems regarding spatial justice in Amsterdam that make us seeking for the Just City again?

The chapter ends with providing planning and design principles that allow the Just City to revive.

Photo 9: "Kraken: Protestaffiches"
(Stadsarchief Amsterdam/Alberts, M, 1993)

3.1 Historical overview development Amsterdam

To understand how the Just City of Amsterdam disappeared, it is important to dive into the urban policies of the past decades and see how they have changed. This is explained in more detail below.

The General Expansion Plan
In the first half of the 20th century, the city of Amsterdam was growing and there was a need for more (social) housing. In the year 1916, a plan was made to build 3500 new houses in the city. Zaandammersplein and the Spaarndammerbuurt were formed during this period, and Plan-Zuid was designed by urban planner Berlage in the style of the Amsterdam School. The General Expansion Plan was established in 1934, allowing the neighborhoods of Bos & Lommer, Slotermeer, Slotervaart, Overtoomse Veld and Osdorp to develop. Although all neighborhoods had different characters, the general values were the same: light, air and space. Due to the economic crisis and World War II, the General Expansion Plan faced many delays, so development did not end until the 1960s. (De Amsterdamse Canon, 2010)

Modernist influences
After World War II, the housing shortage in the Netherlands intensified, threatening accessible and affordable housing in the city of Amsterdam. Modernism emerged and plans were developed in which demolition took place and the existing housing stock would be replaced by high-rise buildings in green surroundings. Modernists were not afraid to adapt and develop existing parts of the city through the lens of modern social needs. During these years, the Jokinen plan was developed as well, in which the Singelgracht was tempered and replaced with a six-lane highway surrounded by high-rise office buildings. The goal behind this plan was to make the city more accessible by car, based on the expectation that the car would become the main means of transportation. (Beuckens et al., 2012)

The rise of the Just City
Although modernist planners wanted to reconstruct and drastically change the city, squatter movements protested the demolition of social housing and advocated the construction of affordable housing. They wanted to preserve the existing housing stock because they felt attached to it, and argued for more democratic planning and state control over the housing market. They succeeded in their protests, and during these years the government made budgets available to stimulate housing production. They build on the idea of the "compact city," a planning strategy in which projects were built within the existing urban structure and in which renovation was preferred over demolition. During this period, there was

civic initiative and population groups established relationships with architects and urban planners to make plans together. The government was able to take these plans seriously and implement them, making the planning process democratic and just. A good example of social initiative and democratic governance was the development of the Dapperbuurt, where modernist designs were protested by citizen action groups, and eventually the design of this action group was realized. (Uitermark, 2009 & Albers, 2021)

During this period, the government decided to place housing corporations under strict state control. From then on, the municipality determined the rents of social housing and defined the types of developments and contracts (Aalbers, 2008). The rights of owners to determine their own use of the property and rents were gradually curtailed. About 35,000 homes (about 15% of the housing stock) were taken out of the market and put under the management of housing corporations so that there was enough affordable housing for everyone in the city. (Uitermark, 2009)

The effects of government control were great. The waiting lists for social housing became much shorter and everyone had access to the housing supply. No longer did income determine what was appropriate, but housing composition did. The right of residents to claim their housing privileges grew and this also highlights the power of residents over the state in these years. Involvement grew and the state came under democratic control, while the housing market was under state control. The situation came very close to the ideal of the Just City as defined by Fainstein (2011), which peaked in 1982. This year, the waiting list for social housing was only 2 years, the shortest it has ever been (Uitermark, 2009).
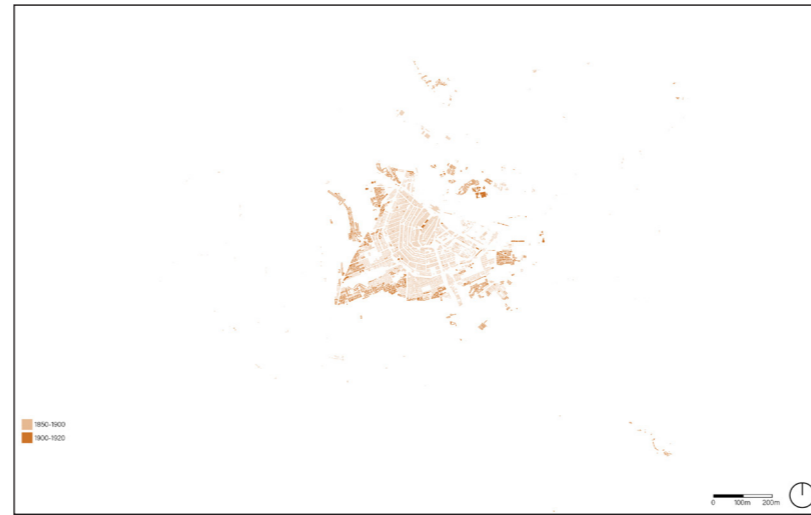
1901: The Dutch Housing Act

Figure 18: Development Amsterdam 1920 - 1940 (Gemeente Amsterdam, 2022)

Figure 19: Development Amsterdam 1940 - 1969 (Gemeente Amsterdam, 2022)

1940-1969: General Expansion Plan

1940-1945: World War II

1962: Plan Jokinen & other modernist plans

Photo 10: Plan Jokinen with highway through living neighborhoods (Stadsarchief Amsterdam/ANEFO, 1967)

1970s: Squatters movement protested against the demolition of social housing

Figure 20: Development Amsterdam 1969 - 1980 (Gemeente Amsterdam, 2022)

Photo 11: Squatters movements in Amsterdam ("Demonstratie tegen de woningnood", Stadsarchief Amsterdam, 1970)

3.1 Historical overview development Amsterdam

The neoliberal paradigm change

In the late 1980s and early 1990s, the planning narrative changed in the city of Amsterdam. While until then it was unthinkable to sell social housing, the British idea of promoting home ownership and selling social housing flew over to the Netherlands. At the time, the proportion of owner-occupied homes in Amsterdam was lower than in other European cities, and the Dutch government wanted to encourage home buying (Aalbers, 2008). The idea grew that the higher income groups could not realize their preferences and that privatizing the housing stock could change this (Uitermark, 2009). The government decided it was necessary to privatize the housing market because the share of home ownership was too low, citizens should have more control over their homes and the environment in which they live. They believed that home ownership could contribute to social goals such as ownership and property (Aalbers & Holm, 2008).

During these years much was changing in housing management. Housing associations were loosening up again and began making plans to sell their housing stock. The Social Housing Sales Covenants I & II allowed housing associations to sell 28,575 homes between 1998 & 2008. In 2006, a new covenant allowed even more sales, 31,000 in the period between 2007 & 2016 (Aalbers & Holm, 2008). New policies were also introduced to support citizens in buying a home. A good example is the mortgage interest deduction (Dutch: hypotheekrenteaftrek) which allows homeowners to deduct mortgage interest from the income they have to pay taxes on. (Uitermark, 2009)

Government changed in governance and with the introduction of more private parties into the urban planning system, the discipline became more complex. The role of the government changed from one of leadership to one of negotiation, and the ability to meet the needs of all parties involved in the process became more complicated. The democratic decision-making of the 1970s and 1980s and the civic initiatives of that period are more difficult to achieve because they often clashed with the needs of the private parties involved. Planning has turned into property-led development and money is often the main incentive for urban change. (Taşan-Kok, 2010)

Today, the city of Amsterdam is experiencing the consequences of the paradigm shift in planning in the late 1980s. The Dutch planning strategy changed from developing housing for a large segment of the population to a new strategy of "social mixing" (Uitermark, 2009). In this strategy, governments and corporations aim to mix low-income households with high-income households by privatizing the housing market. But instead of a balanced mix, the city currently suffers from a lack of housing in general, but especially affordable housing. This results in the fact that the waiting list for social housing has increased from 2 years in 1982 to more than 13 years in 2021 (van Amstel-Smidts, 2021).

Current paradigm change

Today's planning paradigm is changing again. The current housing crisis is making policymakers aware of the importance of inclusive urban renewal and building for all. A new form of the Just City must be found in order to create spatial justice. The rest of this chapter discusses what we can learn from the past, what problems we face today, and why we cannot go back to the situation of the 1970s.

1970s: Case of the Dapperbuurt

1982: Peak of the Just City
Waiting list for social housing 2 years

Late 1980s/1990s: Planning Paradigm Change.
Start of privatizing the Housing Stock

Photo 12: Protests Dapperbuurt ("In het stadhuis, Oudezijds Voorburgwal 195, protesteren bewoners uit de Dapperbuurt op de publieke tribune van de raadszaal", Stadsarchief Amsterdam/ANEFO, 1972)
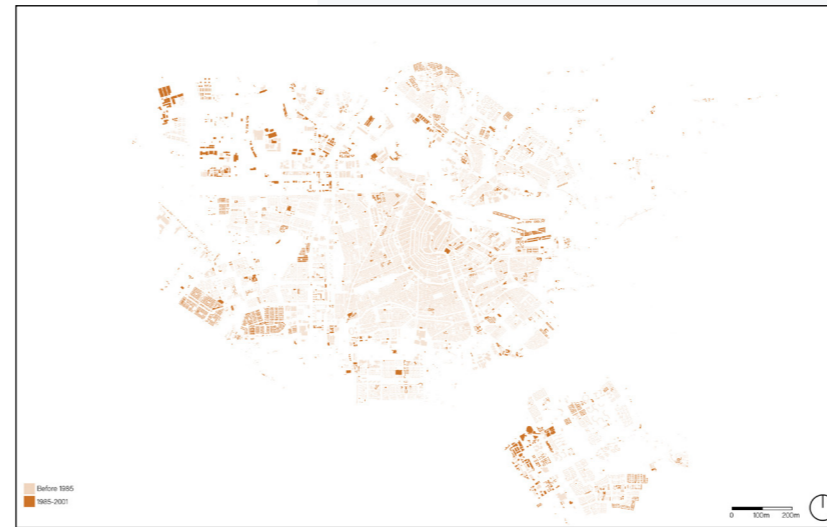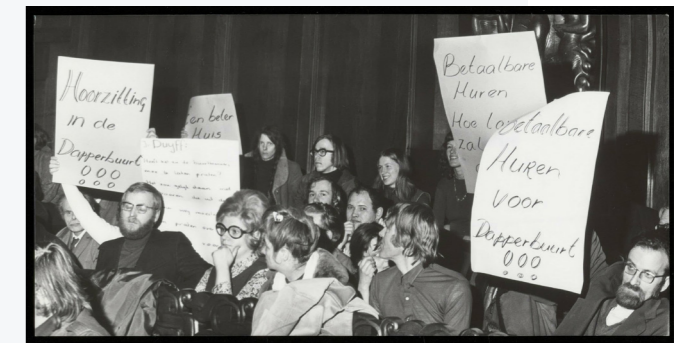

Figure 21: Development Amsterdam 1980 - 2001 (Gemeente Amsterdam, 2022)

1997: Social Housing Sale Convenant I

2001: Introduction *Hypotheekrenteaftrek*

2002: Social Housing Sale Convenant II

Figure 23: Social housing sale convenant 2011 - 2020 (Gemeente Amsterdam et al, 2011)
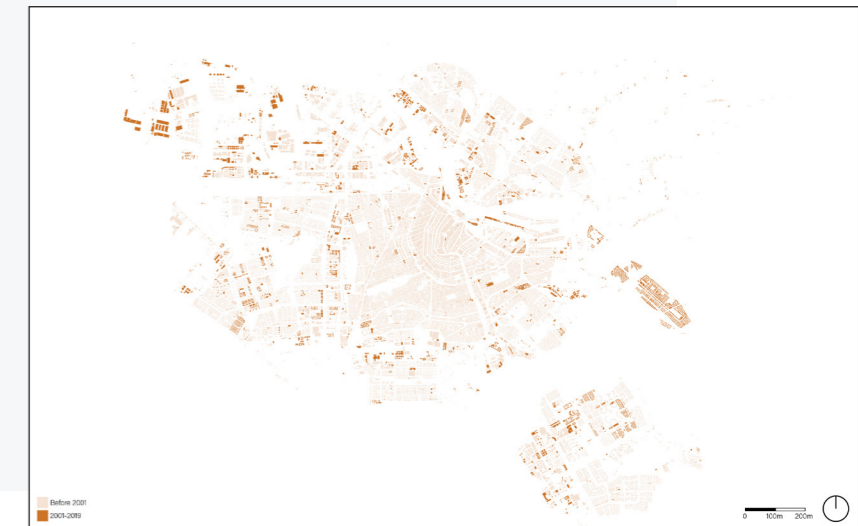

Figure 22: Development Amsterdam 2001-2019 (Gemeente Amsterdam, 2022)

2010: Waiting list social housing 10 years

2021: Waiting list social housing 13 years

3.2 Urban planning in a Just City
The case of the Dapperbuurt

The Just City of Amsterdam can be well explained through an example of how in the 1970s and 1980s bottom-up initiatives were given a chance within the Amsterdam government structure. This example will be provided by examining the case of the Dapperbuurt in Amsterdam in which modernist plans were replaced by a citizen initiative, created through collaboration between a local residents' group and a passionate architect. (Albers, 2021)

The Dapperbuurt is a 19th-century neighborhood that was considered run-down by modernist planners in the 1960s. The first City Nota Stadsvernieuwing stated that the neighborhood needed to be renewed to meet the modern needs of the time. The urban area was a high priority for the city government and they had big plans for it. In 1972, a plan was presented that proposed Dapperbuurt as a low-density and open area with lots of daylight and space. All building blocks in the neighborhood would be replaced with new ones and the housing density would be halved. The living space in the houses would be doubled and no longer affordable for the residents living there. The residents would be placed out of their homes and the population would be completely replaced by new, wealthier, populations. (Albers, 2021)

During a public meeting in the Dapperbuurt in 1970, a number of residents got together and began to form a new action group they called "The Strong Arm". The group not only began to protest the plans, but also started to develop their own ideas. Working with an architect who supported their values, they began to create their own new ideas about how the neighborhood should be redeveloped. "Development teams" were formed and many gatherings followed to make their ideas concrete and tangible. (Albers, 2021)

The Strong Arm initiative met with success, as in 1972 Alderman Han Lammers began to reconsider the existing plan and developed a new zoning plan that included modifications. The city council began to see the importance of involving residents and created a new approach to redevelopment. At the end of the year 1973, they held several meetings in which they presented different scenarios and plans for the redevelopment. They decided to let the residents choose between the different scenarios they created. (Albers, 2021)

But the action group disagreed. They wanted to be fully part of the decision-making process and wanted their self-created design groups to be part of the proceedings. The municipality could no longer oppose this, and indeed, eventually they became fully part of the process, and "direct democracy" was established. The zoning plan was fully adapted to the needs of the citizens and much of the neighborhood remained as it was. (Albers, 2021)
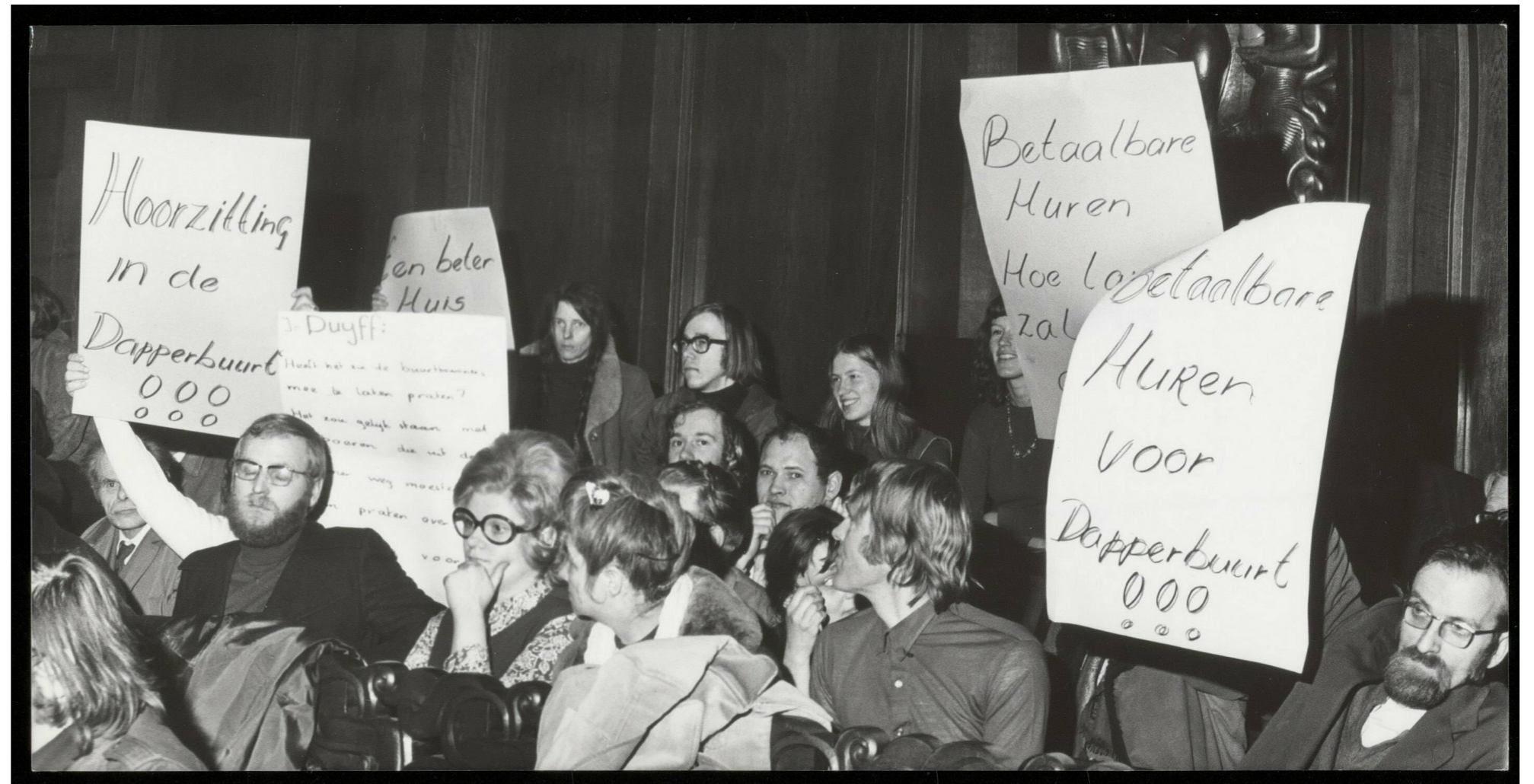
3.3 Reasons for a changed narrative

As can be seen from the timeline, the planning narrative of the late 1980s and 1990s changed much in the housing market and urban development over the past few decades. There were several reasons and issues in the economy, society and governance that resulted in the changing paradigm. Below, an elaboration is given of why the planning narrative changed and what problems it sought to answer.

Problems in economy
In the 1970s, the Netherlands experienced a major economic downturn. After two oil crises, the Dutch economy was struggling with high inflation and unemployment and economic reform was needed. Compared to other countries in the world, and especially Europe, the Netherlands lagged behind in economic growth and structural problems became visible and obvious. The economy itself had also changed. For more than a century, the Dutch economy had been focused on industry, but now a "new economy" was emerging. Work was gradually becoming more focused on knowledge services and competing in the global marketplace. The globalization of the products and services market called for better development of Dutch business and a focus on a "competitive Netherlands." The idea that a more liberal market could lead to a higher gross national product rose and a more privatized economy would bring this about. The crisis, along with the changing economic context, necessitated a reform of the role of government and called for a transformation of state intervention. (Stellinga, 2012)

Problems in society
The challenges in the economy were not the only developments that called for a different role of the government. Social development in the Netherlands also called for different leadership. In the second half of the 20th century, the population became more complex, differentiated and individual and the hierarchical style of government no longer suited. In the 1960s, economic growth made people more financially independent, and innovation in ICT provided greater access to information and a generally higher level of education. The desire for greater individual freedom and the abandonment of old traditions in family and religion led to a situation where existing products and services no longer met the individual demands of citizens. The need for institutional change grew and a more liberal market could contribute to this. (Stellinga, 2012)

Problems in governance
Finally, problems in governance itself also increased. The economic crisis put pressure on government budgets and increased public debt. In addition, the size and complexity of government tasks also made the institutional system inefficient and lacking in coherence. Ministries and municipalities struggled to manage their organizations in an effective and coordinated manner. Debt and the need for institutional reform increased the importance of more market forces. (Stellinga, 2012)

Towards a new strategy
The developments explained created space for new ideas about the division of roles between the market, government and society. The idea that markets could lead to a better allocation of resources and that governments did not work efficiently enough gained more support, and politicians focused on shrinking the prominent role of governments. They believed that freeing up the market could lead to better service to individual demands and budgetary savings for government. Across society, but especially in the housing sector, markets were freed up and government withdrew. (Stellinga, 2012)

Economy

Inflation
Economic Crises
Unemployment

Society

Social-economic differentiation
"New" Economy
Growing Complexity

Governance

Inefficiency
National Debt
Uncoordinated

Figure 24: Reasons for a changed narrative (Own figure, based on knowledge from Stellinga, 2012.)

3.4 Strategy for a changed narrative

The changing context of government involvement in urban development led to three developments in national and municipal leadership, namely privatization, deregulation and decentralization. These three aspects formed the basis of the Dutch government's new planning strategy in the 1980s, 1990s and 2000s. The characters and intended goals of these strategy aspects are explained below. (van der Wouden et al., 2006)

Privatizing
Privatization is defined in this report as the transfer of public functions to the private sector. In the 1980s and 1990s, this happened in the housing market due to several developments. First, housing associations became more independent of the government. In the 1970s there was strict government control of housing associations, but in the 1980s and 1990s this changed and the associations developed more individually. Although the organizations still had the clear task of developing housing for the lower-income groups, they became actors caught between the market players and the government. (van der Wouden et al., 2006)

Second, the government also began to encourage home ownership. This could lead to more independence for citizens and a better supply for individual needs. Privatization leads to more market intervention and this made it possible to respond to societal developments of social differentiation. The government also believed that home ownership could lead to better housing conditions and an overall better state of the city. Home ownership would increase citizens' responsibility for maintaining their homes and increase their involvement in the neighborhood. Also, more market involvement would lead to a better mix of people and more socioeconomic differentiation. Policymakers believed this would increase social cohesion in the city and lead to better livability. (van der Wouden et al., 2006)

Deregulating
Deregulation of the housing market in this report means a simplification of existing urban development policies. By deregulating, the government wanted to create a more flexible housing market in which the supply of homes could respond more quickly to demand. Policymakers believed that markets were better able to respond efficiently to housing market demand and that by liberalizing the housing market, a better allocation of resources would be achieved. (van der Wouden et al., 2006)

Decentralization
The final aspect of the new planning strategy was decentralization. Many governmental tasks were transferred from the national level to the regional or municipal level. These are tasks concerning decision-making on building volumes, building programs and new construction sites. By decentralizing these tasks, the government wanted to better match supply to local and regional demand and allow more initiative from

market parties. Market parties could better respond to the demands of the times and respond better to local differences, they believed. Finally, by transferring tasks to the municipality, policymakers aimed to encourage development within the already existing city limits, rather than in rural areas. (van der Wouden et al., 2006)
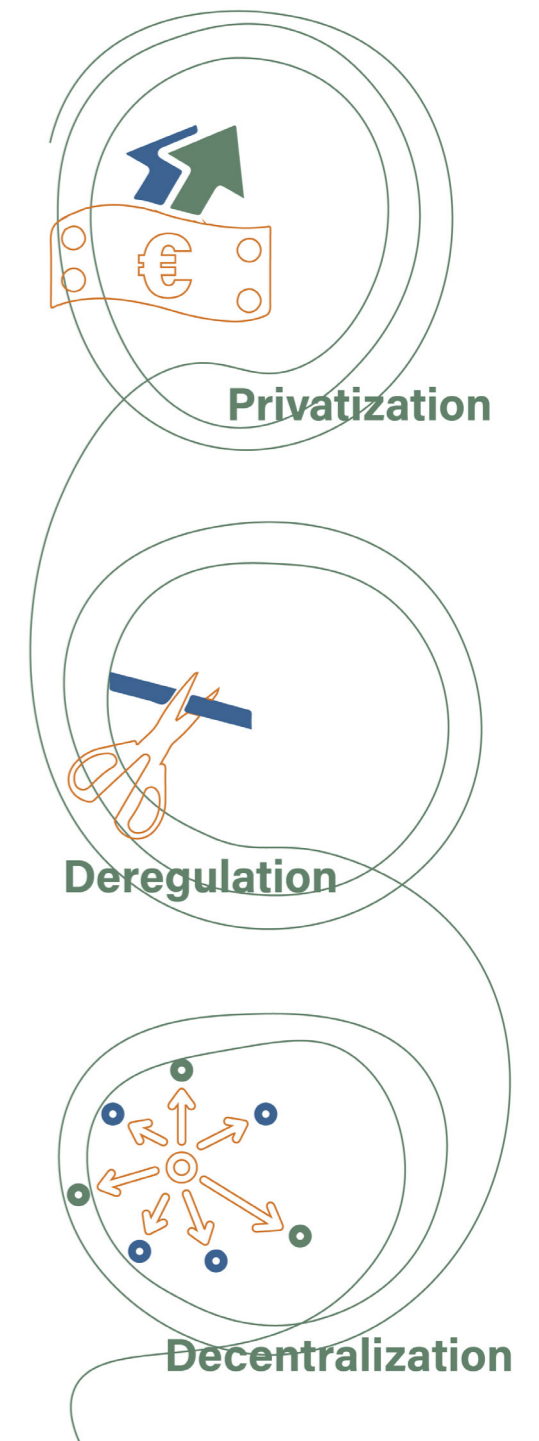
Privatization

Deregulation

Decentralization

Figure 25 Strategy after a changed narrative (Own figure, based on knowledge from van der Wouden et al, 2016)

3.5 The neoliberal paradigm change in global context

The changed planning paradigm of privatization, deregulation and decentralization can be placed in a global context of evolving urban planning. In the 1990s, social conditions around the world changed and the influence of globalization and the knowledge economy increased. Amsterdam had to compete in the global arena with cities such as London, Paris or New York, and planners felt the urge to invest in the growth of the knowledge economy. To compete on this global economic scale, the municipality wanted to attract higher-educated populations who could contribute to the rise of the knowledge economy. The private housing market could bring this about and actually attract these groups. (van der Wouden et al., 2006)

Big City Narrative

Not only were municipalities afraid of losing their strong economic position in the global market, they were also influenced by planners who strongly believed that concentrating on the knowledge economy and attracting higher-income groups would lead to greater prosperity for all citizens. In the Big City Narrative (Cox & Longlands, 2016), planners advocated strengthening urban centers and creating more agglomeration in city centers. They believed that "cities are the great engines of innovation, models of economic and social progress" (Florida, 2017 (p.12)). The idea grew that wealth created by agglomeration effects in urban centers would "trickle down" to all levels of society, such that everyone could benefit (Cox & Longlands, 2016). The narrative, therefore, focuses on strengthening urban centers and attracting workers who contribute to economic growth (Florida, 2017).

The Big City Narrative in Amsterdam

The Big City Narrative flourished in Amsterdam and has long been the leading narrative in the city's municipal planning. Policy documents focused on strengthening the economic core and allowing high-end functions to rise. Many higher-educated people from surrounding municipalities were attracted and the city of Amsterdam was the work location for a lot of citizens from the region. The agglomeration became stronger and much was invested in knowledge locations. A good example is the Zuidas, which had the ambition to become a business hub of international allure. (Oudenampsen, 2008, Harvey (1989) & Municipality of Amsterdam, 2009)
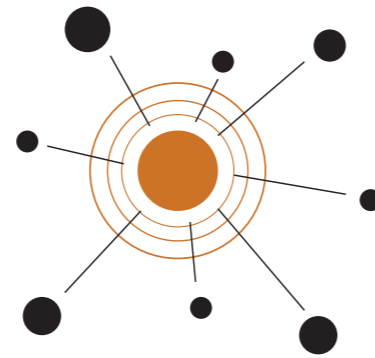

Figure 26: Illustration of the Big City Narrative with a focus on the growth of the core city (Own figure, based on knowledge from Florida, 2017)

Photo 14: Impression of the Zuidas Development ("Zuidas", Stadsarchief Amsterdam/Kransberg, D, 2003)

3.6 Effects of the changed planning paradigm

The effects of the Big City Narrative & neoliberal planning

Years later, the effects of the changed planning paradigm can be examined and its impact is visible. From data of Metropoolregio Amsterdam (2020), it can be concluded that the Big City Narrative and its focus on economic growth have brought overall wealth to the city of Amsterdam. The city, especially compared to other cities in the region, has experienced a large increase in added value and employment (Metropoolregio Amsterdam, 2020). While this is good for the city's overall prosperity, Figure 29 also shows that the occupations for which prosperity has grown the most are primarily the higher-educated occupations. Lower-educated occupations have remained at the same level or even shrunk. Figure 28 also shows that mainly Amsterdam has benefited from economic prosperity, and surrounding municipalities less so. This shows that prosperity has not fully "trickled down" to surrounding areas and other population groups, and that the new strategy has created inequality and polarization. (Metropoolregio Amsterdam, 2020)

Florida (2017) in his book "The New Urban Crisis" describes the effects of the Big City Narrative and its focus on attracting higher income groups to metropolitan cities. He argues that in large cities worldwide, access to housing for lower- and middle-income residents is in danger, and rapid urbanization makes city living only affordable for high-income populations. Large metropolises have become "cities of the elite" and inequality is increasing. Lower-income people are being pushed out of the city and equal access is threatened. He also says that the hypothesis that wealth would trickle down to lower-income groups is false and that disparities are increasing. (Florida, 2017)

Van Gent & Jaffe (2017) also explain that although the city of Amsterdam has experienced overall economic growth in recent decades, inequality between the urban core and the periphery has also increased. It can be concluded that the new strategy of the 1990s has increased polarization in the city and threatened spatial equity.
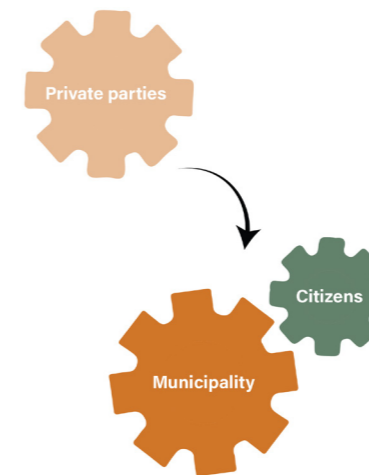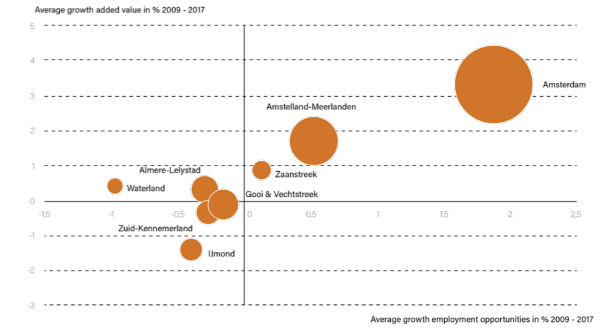

Figure 27: The growth of the different municipalities within the Metropolitan Region Amsterdam between 2009 and 2017, showing that Amsterdam has grown a lot while other municipalities stayed behind (Metropolitan Region Amsterdam, 2020)
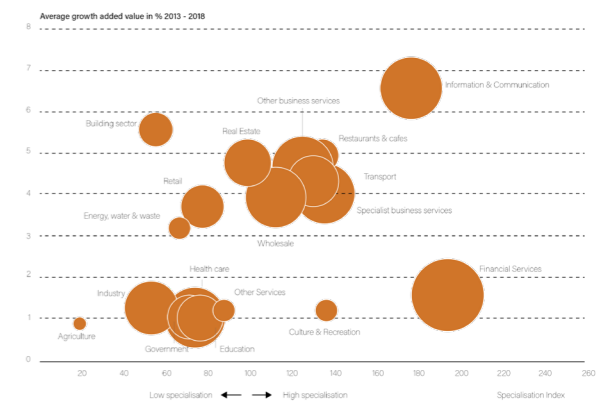

Figure 28: The growth of the different professions within the Metropolitan Region Amsterdam between 2009 and 2017, showing that knowledge-intensive professions has grown a lot while other professions stayed behind (Metropolitan Region Amsterdam, 2020)

Governance

The changing planning paradigm has not only led to differences in economic conditions but has also changed governance. Taşan-Kok (2010) explains that urban policymaking has become increasingly complex due to the large number of stakeholders involved in the development process. While in the 1970s, the government and citizens were the main actors in the development process, today many private actors are involved in the process. The interests of these actors are mainly focused on making a profit, while public actors and citizens are more interested in a sustainable and livable environment, which is often expensive. Although the introduction of private parties also creates opportunities and financial capacities, it has also led to real estate-oriented development with less attention to livability. (Taşan-Kok, 2010)

In this new system of development, governments have taken a different role. Instead of being the main decision maker, governments now have a negotiating role. Government, in which a limited group of people make big decisions, is replaced by governance, in which there is a network approach and a compromise between different needs is needed. (Taşan-Kok, 2010)

The effect of the changing dynamics in the development process is that there is often more focus on individual projects, looking at one or a few blocks, than on planning, looking at larger city structures. It also often happens that private parties are more interested in primary sites and secondary sites lag behind in quality. This shows how the effects of the changing planning narrative lead to complex development processes and greater inequality in the city. (Taşan-Kok, 2010)

Figure 29: Impression of private parties joining the complex urban development system (Own figure, based on knowledge of Taşan-Kok, 2010)

As explained on the previous page, the Big City Narrative (and the neoliberal strategy that goes with it) has led to increased inequality in the city of Amsterdam. To better understand how this has changed metropolitan life in the city, data analyses are conducted. The following pages illustrate the change of 4 types of spatial justice indicators over time, namely demography, housing, functions and social indicators. The changes in these categories show how Amsterdam has grown as a city of the elite and how it no longer meets all the requirements of a Just City. This provides insight into the effects of the neoliberal change in the planning paradigm and the problems of contemporary Amsterdam.

Demography
The first indicator that is being researched, is the indicator "demography".

Change in population composition
Amsterdam's demographics have changed significantly in recent decades. The city has focused on attracting higher income groups and this has led to a different population composition. In the years between 2013 and 2017, the number of higher-educated people in the city increased significantly, while the percentage increase of lower-educated populations was only 3% (De Ridder et al, 2020). The illustration below shows that demographics are also polarizing in the city of Amsterdam (CBS open data, 2017). In the periphery, the amount of lower-income households is high, while in the city core, it is very low. These data show that Amsterdam's demographics are not very diverse and that there are large differences between neighborhoods. This creates inequality in the city and threatens diversity.
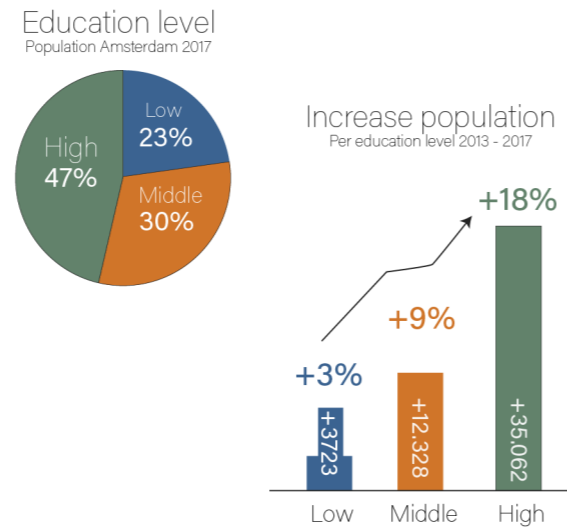

Education level
Population Amsterdam 2017

Increase population
Per education level 2013 - 2017

Figure 30: Change population composition per education level (De Ridder et al, 2020)

Figure 31: Share of lower income households 2017 (CBS open data, 2017)

Migrants in the city
Not only have the demographics in terms of education level changed in Amsterdam, but the proportion of people with a migration background has also changed due to the planning policies of recent decades. Again, it can be seen that things have changed differently in the city core than in the outskirts. In the core, the share of non-Western migrants has not changed or decreased much, while in the periphery the share of non-Western migrants has increased significantly (Amsterdamse Bureau voor Onderzoek en Strategie, 2002 & Gemeente Amsterdam, 2012). This shows that over time migrants have been increasingly pushed to the periphery of the city. This again causes polarization and a threat to diversity in the city. It proves the creation of a city that excludes lower-income groups and migrants.
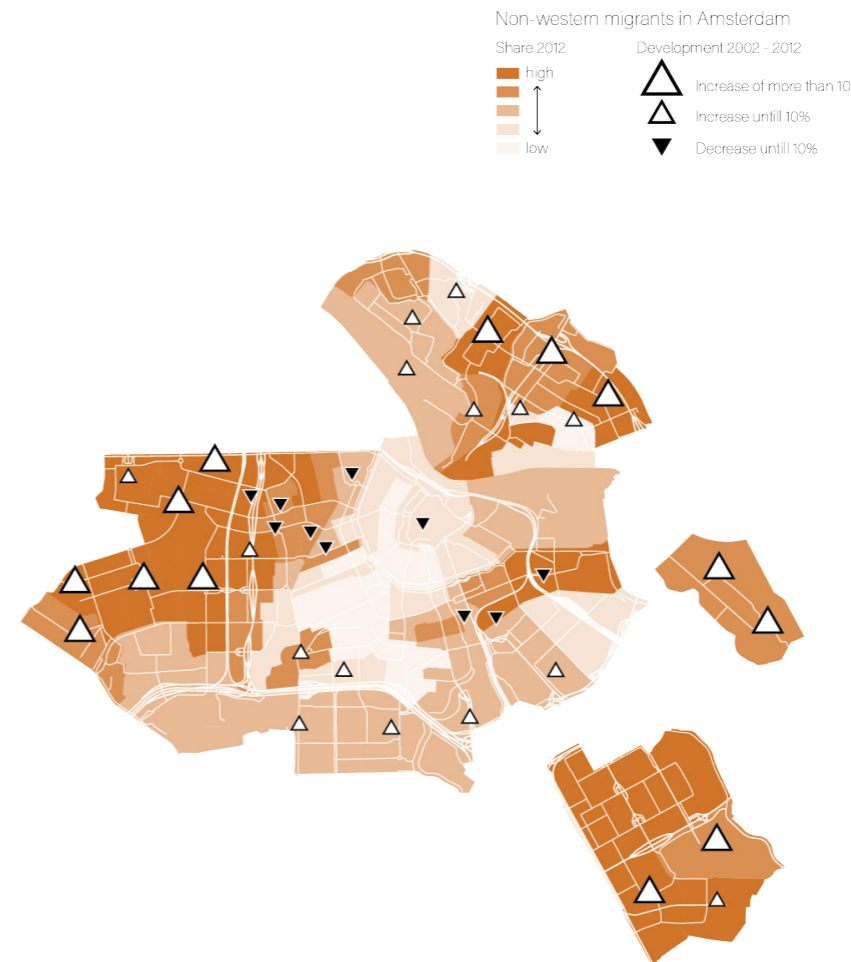

Non-western migrants in Amsterdam

Share 2012 — Development 2002 - 2012

Figure 32: Change population composition between 2002 and 2012
(Amsterdamse Bureau voor Onderzoek en Strategie, 2002 & Gemeente Amsterdam, 2012)

Population composition Amsterdam core 1995

Population composition Amsterdam core 2015

Population composition Amsterdam periphery 1995

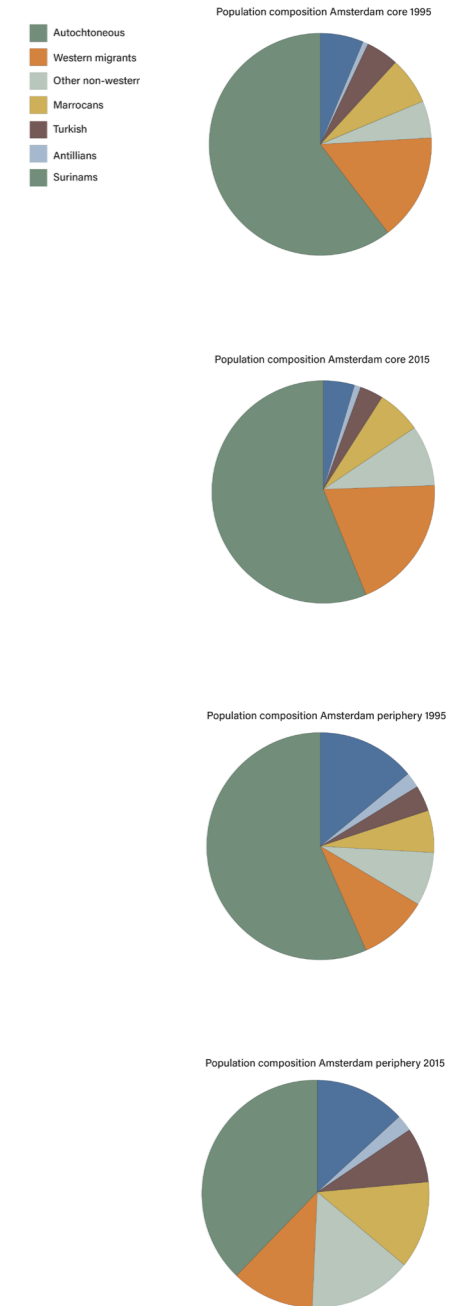Population composition Amsterdam periphery 2015

Figure 33: Change population composition between 2002 and 2012 (Amsterdamse Bureau voor Onderzoek en Strategie, 2002 & Gemeente Amsterdam, 2012)

3.8 Current problems in Amsterdam
Housing

After researching the changing demographics of Amsterdam, the indicator of housing will be further examined.

Changing housing prices
Housing prices in the city of Amsterdam are under pressure. In recent decades, the average house price per square meter has risen rapidly and, especially in the inner city, housing has become increasingly unaffordable. The maps on the left show how the inner city has become inaccessible to lower-income groups over the years and how these groups are increasingly being pushed to the periphery of the city. It also illustrates that if nothing changes, increased housing prices will continue to spread, making the entire city inaccessible in the future. This shows the vulnerability of neighborhoods outside the city ring. (Gemeente Amsterdam, 2022)
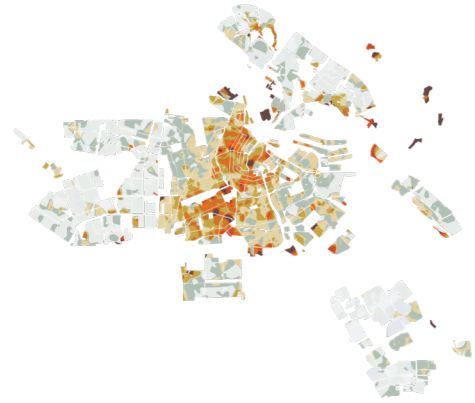
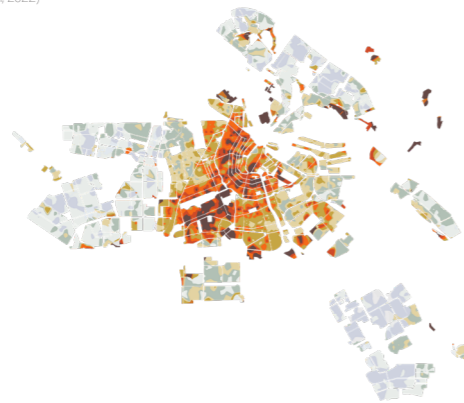**Figure 34:** Average housing prices 2003 (Gemeente Amsterdam, 2022)

Figure 35: Average housing prices 2010 (Gemeente Amsterdam, 2022)
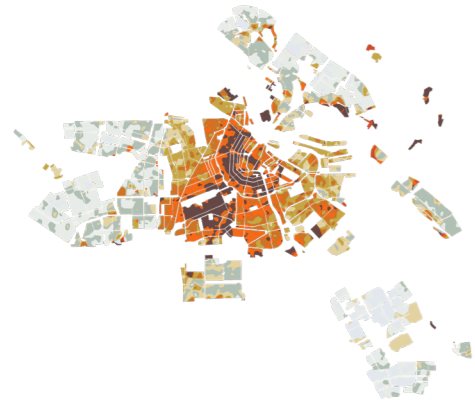
Figure 36: Average housing prices 2015 (Gemeente Amsterdam, 2022)

Figure 37: Average housing prices 2017 (Gemeente Amsterdam, 2022)

Figure 38: Average housing prices 2019 (Gemeente Amsterdam, 2022)

Which of the following situations has happened to you as a starter while looking for a home?

- The price is far above market value
- To little supply in my price range
- The houses in my price range do not meet my wishes
- The house was already sold before I could see it
- I could loan less than I wanted
- I felt to much pressure to decide fastly
- I've been outbid
- I felt pressure to outbid
- The bidding isn't transparant and fair
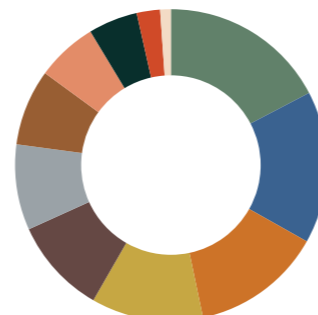- None of the above
- My offer has been declined

Figure 41: Struggles of starters on the housing market (Vereniging Eigen Huis, n.d.)

3.8 Current problems in Amsterdam
Housing

Migration metabolism
The increase in housing prices leads to a certain migration metabolism in the city. In this regard, it is interesting to know which population groups move the most and what the trends are in the movement, to see how this leads to inequality. Figures 40 & 41 show that across all population groups, there is a trend of a decrease in people moving to Amsterdam from other cities in the MRA or from elsewhere in the Netherlands (Metropoolregio Amsterdam, 2019). Although there are still more people moving into the city than out, it can be seen that this trend is decreasing. It can be concluded that for all groups, either the desire to live in the city is shrinking or the city has too few accessible homes and it is difficult to buy a home in the region one wants. Looking at Figure 41, it can be seen that the latter is often the case and that many house seekers have problems buying the home they actually want (Vereniging Eigen Huis, n.d.).

The data show that housing is becoming increasingly unattainable for certain population groups. Prices are rising rapidly and a major problem for citizens is the unaffordability of housing in Amsterdam. This shows the increasing inequality in the city and the growth of Amsterdam as a "city of the elite".

Figure 39: Migration flows to and from the Municipality of Amsterdam (Own Figure, derived from Metropoolregio Amsterdam, 2019)

- Increasing outflow
- Increasing inflow
- Decreasing inflow

Target Group	Moving to Amsterdam from elsewhere in MRA	Moving from Amsterdam to elsewhere in MRA	Moving to Amsterdam from elsewhere in NL	Moving from Amsterdam to elsewhere in NL	Moving to Amsterdam from abroad
Starter	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	
	-7%	8%	-14%	39%	
	Saldo Amsterdam & other cities MRA 2017/2018		Saldo Amsterdam & other areas NL 2017/2018		
	2800		7680		
Young people till 35 y/o	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018
	-6%	19%	-13%	30%	22%
	Saldo Amsterdam & other cities MRA 2017/2018		Saldo Amsterdam & other areas NL 2017/2018		Saldo
	1885		10.015		16.572
Families	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018
	-6%	14%	-14%	21%	21%
	Saldo Amsterdam & other cities MRA 2017/2018		Saldo Amsterdam & other areas NL 2017/2018		Saldo
	-5452		-2388		2129
Seniors	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018	Difference between 2015/2016 & 2017/2018
	-8%	13%	-5%	28%	13%
	Saldo Amsterdam & other cities MRA 2017/2018		Saldo Amsterdam & other cities MRA 2017/2018		Saldo
	-908		-627		914

Figure 40: Migration flows to and from the Municipality of Amsterdam (Metropoolregio Amsterdam, 2019)

3.8 Current problems in Amsterdam
Housing

Housing conditions
Changing housing conditions also illustrate inequality in the city of Amsterdam. The table to the right shows that certain housing types have increased in quality and living area while other housing types have not. In particular, single-family houses have become much larger, while multi-family houses have remained the same. This shows that those who can afford single-family homes have consumed better housing conditions than those who cannot. This shows inequality in housing conditions in Amsterdam. (CBS Open Data, 2022)
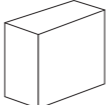
	Single-family dwellings	Multi-family dwellings
	Average surface in m²	Average surface in m²
2012	102	70
2013	104	70
2014	106	70
2015	107	71
2016	108	70
2017	109	70
2018	110	71
2019	112	71
2020	113	71
2021	113	71
2022	114 (+12 m² compared to 2012)	71 (+1 m² compared to 2012)

Table 1: Development housing conditions per housing typology Amsterdam (CBS Open Data, 2022)

3.9 Current problems in Amsterdam
Functions

The next indicator that will be researched is the change of functions in Amsterdam.

Program
Programs and services in the city are important determinants of equity and spatial justice. Access to functions, as well as program change in the city, says something about the growth of inequality. Over time, functions and services in the city have changed. These functions are related to culture, cafes and restaurants, stores and community centers. The increase, decrease or change of these functions illustrates how the city is increasingly serving only the needs of those with higher incomes and less those with lower incomes.

Restaurants & Cafes
The number of restaurants and cafes in the city of Amsterdam has increased significantly in recent decades, especially those with terraces. The Dutch capital owns 6.3% of all terraces in the Netherlands and has the highest terrace density in the entire country, at 387 citizens per terrace (Datling, 2020). Figure 46 illustrates how the number of cafes in each neighborhood of the city has increased.

The growth of eateries and terraces in the city is a sign of how equal access in the city is threatened and how the city primarily serves the needs of a particular demographic group (Rli, 2020). Restaurants and cafes are a service intended primarily for the highest income groups. People who do not have the ability to pay for a drink cannot use this service, and its growth is causing people to feel excluded from their urban environment and not feel at home. (Rli, 2020). Also, as terraces occupy more and more space in the streets or squares, open space accessible to all income groups is threatened and the possibility of free and spontaneous use of urban space shrinks.

Photos 14 & 15 illustrate a street in Amsterdam whose functions changed over the years, namely Javastraat, in the years 2013 and 2021 (Google Maps). Here you can see how people in 2013 freely used the public space in front of their homes as a place for interaction and relaxation. In 2021, there is a new cafe here and this public space is no longer accessible without paying. This is a good example of how the increase in eateries has served a wealthy class but excluded other classes from the streetscape.

Figure 42: Mixed-use index (PDOK, n.d.)

7,8%

Increase Prices Terrace Amsterdam (2019)

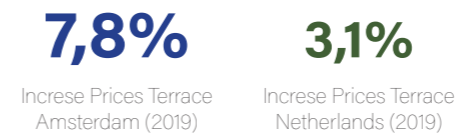**3,1%**

Increase Prices Terrace Netherlands (2019)

Figure 43: Increase prices terraces Amsterdam & Netherlands (nu.nl, 2019)
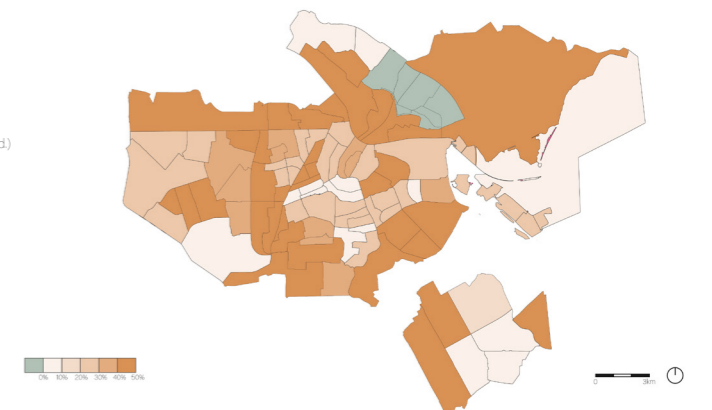

Figure 44: Increase eateries Amsterdam between 2012 and 2020 (Datling, 2020)

Photos 15&16: Change of the Javastreet between 2013 (left picture) and 2021 (right picture) (Google Maps, 2013 & 2021)

Cultural industry

Another function by which a change in the Just City can be measured is the supply of cultural activities in the city and cultural participation. Overall, cultural activity in Amsterdam has increased over the past 20 years (Gemeente Amsterdam, 2019). Visits to museums, festivals and cinemas have increased and young people, in particular, are participating more and more. But, growing participation is not evenly distributed across all ethnic groups and all income groups. Figure 49 shows that in the cultural activities that have grown the most, mainly people with a fully Dutch background participate (Gemeente Amsterdam, 2019). Many of the cultural activities are inaccessible to people with a migration background because, as Figure 48 says, it is often too expensive (Gemeente Amsterdam, 2019). This shows that cultural functions have grown in the urban landscape, but not for all people in the city. The supply of culture is mainly focused on those who can afford it financially and those who can't afford it much, often the non-Western migrants, experience a lack of cultural supply (Figure 48, Gemeente Amsterdam (2022). This shows inequality in the city because it is a sign of how functions are increasingly focused on a group with higher incomes. Figure 51 illustrates which neighborhoods in Amsterdam experience a lack of accessible cultural facilities in particular.

Community homes

A cultural function that is often valued by people with a migration background or lower income are community houses (Rli, 2020). This type of cultural facility has declined drastically over the past 10 years, and many community houses in Amsterdam were sold. This is a sign that cultural facilities valued by a certain income group are threatened, and the decline of community houses illustrates that certain population groups are excluded from metropolitan life. With the strategy of decentralization, many services and health care that used to be in public buildings were now resolved behind closed doors, causing the disappearance of community centers. (Rli, 2020)

	Youngsters				Grown-ups			
	2002	2006	2010	2019	2002	2006	2010	2019
Visiting Museums	60	63	60	77	57	51	51	60
Visiting Theatres	49	59	53	55	63	66	56	55
Visiting Cinema	91	91	90	94	61	51	60	64
Visiting Festival	32	31	47	40	29	36	47	44
Being creative individually	60	69	65	71	60	56	46	47

Table 2: Increase or decrease use of certain cultural activities (Gemeente Amsterdam, 2019)
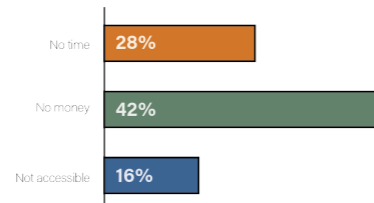

Figure 45: Reasons for non-western migrants to not visit cultural activities (Gemeente Amsterdam, 2019)
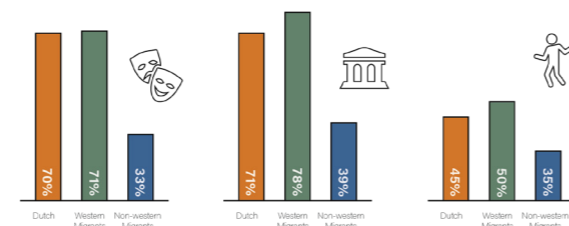

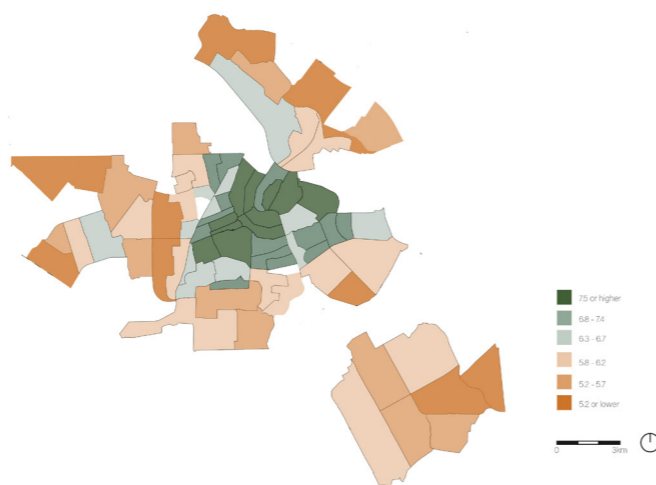**Figure 46:** Visitors of cultural acitivities (Theatre, museum, festival) (Gemeente Amsterdam, 2019)

Figure 47: Average score per neighborhood for appreciation for community homes per neighborhood (Gemeente Amsterdam, 2022)

Figure 48: Score per neighborhood for appreciation for cultural activities (Gemeente Amsterdam, 2022)

1/3

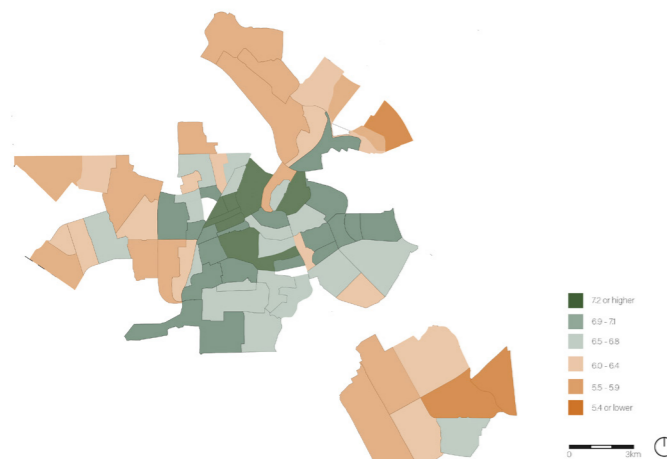Of the community homes disappeared in Amsterdam (Movisies, 2020)

Retail

Functional change is also visible in the retail sector. The Monitor Detailhandel 2019 (Gemeente Amsterdam) shows how the retail trade has developed in the period 2008 to 2018 and how the number of stores, as well as the space occupation of stores, has changed over time. Here it can be seen that there are more and more retail chains in the city that occupy more space. With regard to daily goods, for example, the figures show that the number of stores has decreased, while the area occupied by these stores has increased. The reason for this is that large supermarkets are taking up more and more space while small supermarkets are disappearing from the streetscape. (Gemeente Amsterdam, 2019)

In some areas, this increase in large supermarket chains leads to more satisfaction with the supply of daily goods, but in other areas to more dissatisfaction. Here it is interesting to note that in the areas where more immigrants and people with lower incomes live (for example, New West or North), there is more dissatisfaction than in areas with more natives (such as the center or Amsterdam East). This shows that retail is developing in a way that makes some population groups more satisfied than other groups and that this development increases inequality in the city. (Gemeente Amsterdam, 2019)

	Increase ammount (%)	Increase space (%)
Centre	26	53
West	-9	33
New-West	-5	7
South	-3	17
East	2	31
North	3	75
South-East	-11	17

Table 3: Increase amount of daily goods retail and increase taken space per district between 2008 and 2018 (Gemeente Amsterdam, 2019)

Figure 49: Share of people satisfied with the supply of daily goods per district, development over time (Gemeente Amsterdam, 2019)

Education

Another example of how functions develop in such a way that there is growing inequality in the city is the development of education in the city. There is generally a teacher shortage in the Netherlands (Poortvliet, 2022), but this is not evenly distributed across city districts. The figure to the right shows that the teacher shortage behaves differently in different city districts. There are larger shortages in the periphery than in the core of the city. This shows inequality of opportunity and increasing polarization in the city. (Poortvliet, 2022)

Figure 50: Shortage teachers per neighborhood in Amsterdam (Het Parool, 2020)

3.10 Current problems in Amsterdam
Social indicators

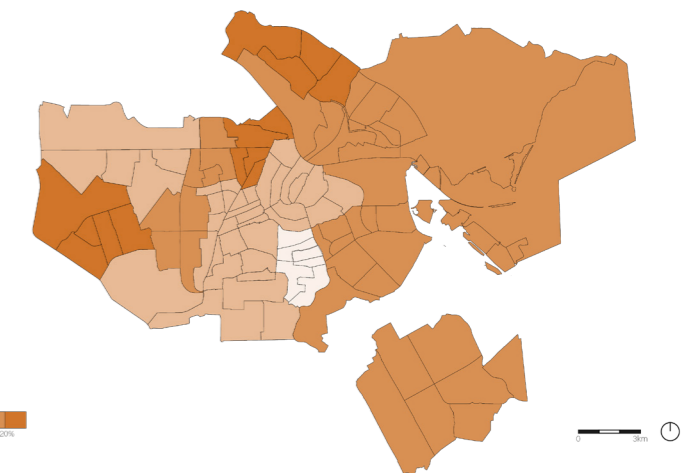While data on demographics, housing and functions already show how inequality is increasing in the city of Amsterdam, other indicators illustrate this as well. Social indicators are a good measurement to see whether people feel heard by the government and satisfied with the urban environment in which they live.

Feeling at home
Figure 54 shows the result of a survey in the different neighborhoods of Amsterdam (Gemeente Amsterdam, 2022). It measured to which extent people feel at home in their neighborhood and which grade they would give this. It can be seen that there are big differences between certain neighborhoods in the city. Again, a difference between the core and the periphery is visible. The places where there are many migrants and people with a lower-income, they feel less at home than the places where many higher-educated people live.

Social cohesion
Figure 55 illustrates social cohesion in different neighborhoods of the city (Broekhuizen, J., 2010). The historical analyses illustrated that social cohesion is important for people to protest together and stand strong for their desires in a just city. Below, it can be seen that there is little social cohesion in many places in Amsterdam and again, in the outer edges of the city, people are least positive about their neighbors and conflicts are more frequent. (Broekhuizen, J., 2010).
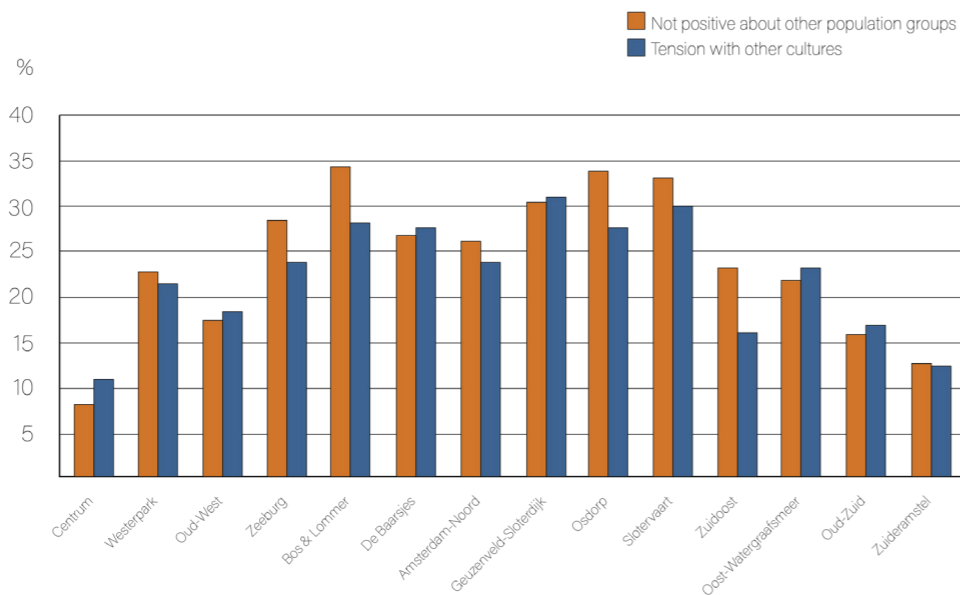

Figure 51: Average score residents on the question "How at home do you feel in the neighbourhood?" (Gemeente Amsterdam, 2022)

Figure 52: Score on polarization-items per neighborhood, % (fully) agree (Broekhuizen, J., 2010)

Voting attendance
Figure 56 shows a general trend in the Netherlands of voter attendance in elections (Den Ridder, J. & Dekker, P., 2022). It can be seen that over the years participation has decreased, especially in municipal elections. This shows that trust in government is declining and people do not feel that their voice is heard. This is also visible in the municipality of Amsterdam. Illustration 56 shows the attendance for the 2022 municipal elections and illustrates that turnout differs between neighborhoods in the city. In the city center, where more natives live, voter turnout is high while in the periphery, where more immigrants and people with lower incomes live, participation is lower. This illustrates that citizens in the periphery have less confidence that their wishes will be carried out. This threatens democracy and makes it a vulnerable place for spatial justice. (Gemeente Amsterdam, 2022)

Figure 53: Show-up National & Municipal Elections 1972 - 2022 (Den Ridder, J. & Dekker, P., 2022)

Voting behavior
Voting behavior also varies between certain neighborhoods in the city. Illustration 57 shows which political party won in the different districts of the city. It can be seen that in the core, people vote for PvdA, Groenlinks or D66, which are socialist parties that also have sustainability as a core value. In the south, the VVD received the most votes, a party popular with higher-income groups. In the periphery, the PvdA won many votes, but parties like DENK and BIJ1 were also popular. These are parties fighting for equality and less discrimination in society. In the end, the PvdA won the municipal elections. This is a socialist party and this shows that people care about equality in the city. (Gemeente Amsterdam, 2022)

Figure 54: Show-up municipal elections 2022 (Gemeente Amsterdam, 2022)

Figure 55: Voting behaviour elections 2022 (Gemeente Amsterdam, 2022)

3.11 Current problems in Amsterdam
Spatial conclusions
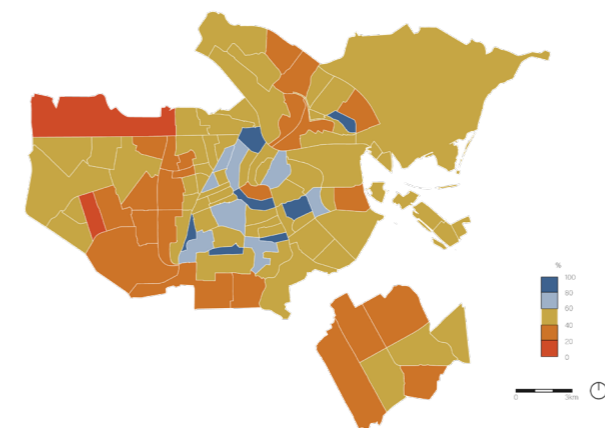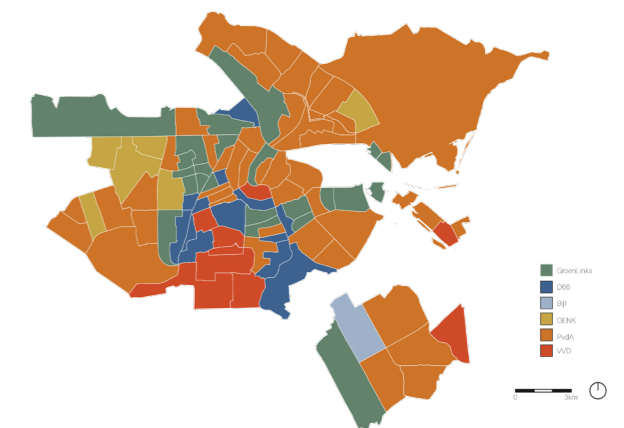
The data analyses provided a comprehensive overview of the current urban metabolic situation in Amsterdam and the spatial justice issues within it. Some spatial conclusions flow from the data analyses. These contribute to important knowledge about planning a Just City, and are therefore explained below.

Spatial barriers
The data analyses show that differences in equity exist between the wealthy core of Amsterdam and the less wealthy periphery. In the periphery, equity is threatened and in the core, the share of higher-income groups is growing. The map below shows that this difference in wealth is also strongly related to the spatial configuration of Amsterdam. Indeed, the core is surrounded by a ring of highways and train tracks, and spatial barriers thus reinforce inequality between the two parts of the city. To increase equity in the city of Amsterdam, it is important to reduce these infrastructural barriers and create a connection between the core and the periphery. In the current situation, spatial barriers create further spatial inequality.
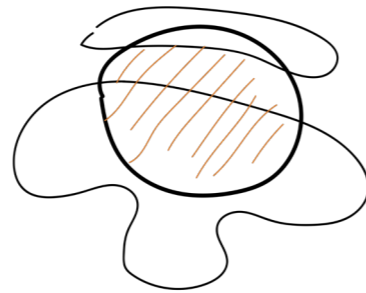

Figure 56: Spatial division between core and periphery in Amsterdam (schematic)

Figure 57: Spatial division between core and periphery in Amsterdam (exact)

Public space is increasingly programmed
The data analyses also reveal that public spaces are increasingly programmed with commercial functions. While Javastraat was largely unprogrammed in 2013, cafes and restaurants are now taking over. This shows that the space is being designed differently. What can be learned from this is that it is important to bring back unprogrammed spaces that can be used by anyone and are non-commercial.

Unprogrammed places

Commercial places

Figures 58 & 59: Schematic change of the Javastreet between 2013 (Google Maps, 2013 & 2021, adjusted)

One-sided development
Finally, the data analyses show that development has become one-sided. Instead of developing mixed uses for all population groups, the emphasis has been on creating housing and functions for one population group. Spatially, this means there is little diversification in the urban landscape. This can be seen in the news article to the right, which shows that Amsterdam-North was transformed in the 2000s primarily to attract one population group (Noorlander, 2017). Therefore, to revitalize the Just City, it is important to re-create mixed-use development and diversify the urban landscape.

Conclusion
Not only did the data analyses say much about the problems of spatial justice in Amsterdam today, they also showed how they affect the spatial configuration of the city. Thus, both planning and design conclusions flow from the data analyses. An elaboration of these follows at the end of this chapter.

Opinie

Amsterdam threatens to become a social uniformity"

The City of Amsterdam's policy toward Noord is aimed at future residents and not current residents, writes Rutger Noorlander.

Het Van der Pekplein in Noord BEELD CHARLOTTE ODIJK

Figure 60: Article " Amsterdam dreigt een sociale eenheidsworst te worden" (translated to English (Noorlander, 2017)

This chapter has shown that while Amsterdam was known as a Just City in the 1970s, today there are problems associated with spatial justice. Although this seems to imply that we must return to the planning system as it was in the 1970s, this is not the solution to the issues. The following explains why going back to the 1970s does not satisfy the requirements for the contemporary Just City and emphasizes the importance of creating a new understanding of a Just City and developing instruments to develop a strategy together.

Sustainability

Sustainable and climate-adaptive building is becoming increasingly important in contemporary urban development. In the 1970s, there was less focus on sustainable building and the focus was on developing sufficient housing rather than sustainable housing. As a result, many of the homes developed during this period now require renovation. For example, the Parool (Hielkema & Kruyswijk, 2022) shows that many of the substandard homes in Amsterdam are in Nieuw-West. This is one of the neighborhoods developed during the period when Amsterdam flourished as Just City.

Other problems

Besides the problems related to sustainability, there are other disadvantages to the building style of the 1970s. Bakker (2013) explains that buildings from this period, for example buildings in the Amsterdam Bijlmer, have failed to create a good combination of scale, variety and identity. He explains how public space is mainly designed only for transport flows and lacks quality. Furthermore, the systematic building style creates anonymity for citizens and a lack of self-expression. Bakker explains that the buildings in the Bijlmer were first enthusiastically received by citizens, but are now perceived as problematic.

Opportunities of the current system

Although this chapter has demonstrated the negative influences of the neoliberal planning paradigm, Adams & Tiesdell (2012) emphasizes that the introduction of private parties into the development process is not necessarily a disservice. He explains that private parties bring financial capabilities that may contribute to sustainable and livable urban environments. Therefore, an opportunity would be missed if a return to the planning system of the 1970s is established. The complex development process must be managed, but not necessarily aborted. (Adams & Tiesdell, 2012)

Conclusion

Amsterdam's status as a Just City in the 1970s and 1980s stems from the fact that the government strictly controlled the housing market and listened to the demands of its citizens. These demands aimed at creating enough affordable housing and making the city accessible to all. The citizens had power over urban development and the government behaved in favor of the user. While this led to democratic and participatory planning, it is also apparent that the development of this period lacked attention to other important aspects of qualitative urbanism. For example, there was little attention to sustainability and expression.

It could be said that the Just City of the 1970s met many requirements for livable and qualitative cities, but did not take full advantage of the complexity of urban planning. In today's Amsterdam, there is a strong need for sustainability, climate adaptation, and identity, and a return to the planning system of the 1970s would not address these necessities. Neither would the possibility of using private financial capabilities. It is therefore important to conclude that the contemporary Just City does not come about by going back to the way things were. This city emerges by embracing complexity while vigorously steering it in the right direction.

Urgency for a new methodology

This chapter has shown how the current system fails in creating spatial justice and leads to displacement of population groups from the city of Amsterdam. On the other hand, it has also shown that a return to the old system of the 1970s and 1980s also does not produce a city in which contemporary needs are met.

This observation highlights the need for a new methodology. This methodology should make it possible to revive the participatory and democratic decision-making of the 1970s while embracing the complexity of contemporary urban planning. The task of this methodology is to return power to the users of urban space while protecting other needs, such as sustainability and climate adaptability. It must enable urban planners to grasp the complexity of developing an Just City and consider all aspects equally. This should not focus on only one aspect (e.g., affordable housing), but should include an understanding of which aspects are part of a Just City and how they can all be protected at the same time.

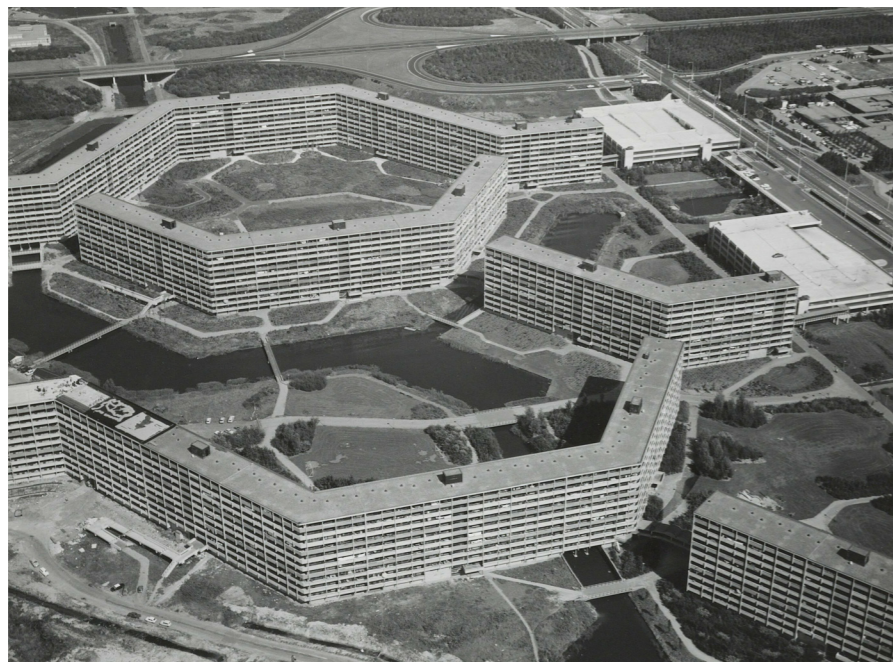**Photo 17:** Impression of building style during the 1970s in Amsterdam ("Luchtfoto Bijlmer-Centrum", Stadsarchief Amsterdam, 1973)

3.13 Conclusion

This chapter answered the research questions:

What made Amsterdam a Just City and how did a paradigm change make the Just City disappear?

What are the current problems regarding spatial justice in Amsterdam that make us seeking for the Just City again?

The Just City of the 70s

Amsterdam was known as a Just City in the 1970s and 1980s because the housing market was under strict state control during this period. Resident movements were allowed to have a say in certain urban planning decisions, and the government translated citizens' voices into concrete plans (Uitermark, 2009). This changed during the planning paradigm shift of the late 1980s. During this period, the Netherlands faced national debt, an oil crisis and social diversification and decided to privatize, deregulate and decentralize urban development (Stellinga, 2012 & van der Wouden et al., 2006). This was in line with a global trend called the Big City Narrative (Cox & Longlands, 2012). This narrative strongly believes that urban agglomeration and focus on metropolitan growth create economic wealth that also trickles down to lower-income segments of society. The City of Amsterdam has long believed in this narrative and invested in the knowledge economy and attracting higher-income groups. This has indeed led to an overall increase in wealth, but an unequal distribution of this prosperity has created a city of the elite and resulted in the scenario of lower-income groups being pushed out (Gent & Jaffe, 2017).

Urban inequality problems

As this chapter has shown, the Big City Narrative has led to a variety of problems in the city of Amsterdam. These problems can be seen in the development of demographics, housing, functions and social indicators. The study found that lower-income residents, often with migration backgrounds, have been pushed to the periphery of the city and the city core has increasingly become a city of the elite. Housing has become unaffordable and disparities in living conditions are increasing. The change of the program in the urban landscape shows that functions are progressively serving only the needs of higher-income populations. Functions such as community centers, which are especially important for lower-income citizens, are disappearing from the streetscape. Furthermore, the social indicators show the lack of cohesion and tolerance in certain neighborhoods of the city. Finally, the conclusions showed the spatial meanings of the findings in the data analyses.

Why we can't go back and the need for a new methodology

Although the problems of inequality in the city of Amsterdam, make us seek for a Just City again, the solution is not to go back to the planning system of the 1970s. While this system met many of the demands of citizens of the time, it had little concern for sustainability and identity (Bakker, 2013). Returning to that system does not meet the needs of today's Just City. Nor would the opportunity to leverage the financial capacities of private actors (Tasan-Kok, 2010). Therefore, the solution is to create a new methodology that embraces the complexity of urban development while steering it in the right direction of equity and (spatial) justice.

Conclusions

Besides, the most important conclusions from this chapter are stated. They form the input for planning and design principles, which will be discussed further in chapter 5.

Conclusion chapter 3

Historical analyses

In the time that Amsterdam was a Just City, the citizens gathered together and created a strong voice. In order to revive the Just City, it is therefore important to *establish social cohesion such that citizens can again become an active voice in the decision-making process.*

The focus of Amsterdam has long been on attracting higher-income groups to the city. In order to restore spatial justice, it is important *to attract all income groups again and create conditions that are available and affordable for all.*

During the 70s, the municipality of Amsterdam took a steering role in urban development and had strong power over the housing market. Furthermore, citizens had strong power over the government. This shows the importance of *power of public actors,* but also of bringing back *democratic decision-making by citizens.*

The paradigm change of the 1990s has resulted in economic progress, but not for every population group. To create urban justice, *it is important that all economies grow in the city* and not only those of the higher-income groups.

Data analyses

Housing prices and the change of functions make the city of Amsterdam polarizing. Lower-income groups are being pushed more and more to the periphery of the city. In order to create a Just City again, it is important to *create access to the city for all population groups on all scale levels.*

Citizens in the periphery of Amsterdam lack access to functions since they are separated from the functional core. It is therefore important *to create access to the functional core and create multiple cores.*

In certain areas there is less government trust and the citizens needs are not translated into action by the government. It is therefore important that *public actors stand for citizen's needs, there is democratic decision-making and the user is placed centrally in the development process.*

Inequality is spatially enforced by having spatial barriers between the wealthy core and the unjust periphery. In order to create more inclusivity and spatial justice, it is important to *limit infrastructural barriers and create spatial connections between the core and periphery.*

The public space is increasingly being programmed by commercial functions. In order to create new flexibility in urban space and allow citizens to give meaning to public space, it is important to develop *unprogrammed places again, which can be formed by citizens and other users.*

The focus of urban development has been mainly on attracting a higher-educated population group. In order to revive the Just City, it is needed that *mixed-use development is being done and there is a focus on all population groups.*

General conclusion

While it is important to give power back to public actors, the solution is not to go back to full public development. The focus should be on steering the complex decision-making process and the complexity of needs in a Just City, while also embracing it and using its potential.

Table 4: Conclusion table chapter 3

4. *The development process*

After defining the problems in Amsterdam, this chapter examines the development process of urban (re)development in the Netherlands and Amsterdam in particular. It examines current problems in the process on a national scale, but also for Amsterdam specifically. Perspectives of different authors will be explained and an example of neoliberal planning will be investigated. This will include research on the organization of this development, the process and the stakeholders involved. Information will be obtained about the neoliberal development process and what can be learned from it for future developments.

The research question that will be answered in this chapter is:

Which problems arise in the planning process, how is it organized and what can we learn from existing neoliberal developments?

The chapter ends with the answer to this research question and an overview of conclusions that will serve as input for establishing a methodology in Chapter 5.

Photo 18: "Protesten tegen de onroerend goedbelasting op het Stadhuis, Oudezijds Voorburgwal 195-201"
(Stadsarchief Amsterdam/Busselman, F., 1984)

As explained in Chapter 3, the changed planning paradigm of the 1990s with a new strategy of privatization, deregulation and decentralization has led to a new reality of urban development. The participation of private parties in the development process has led to an increase in the number of stakeholders and therefore a more complex decision-making environment. In the process, there are many conflicting interests. For instance, private parties benefit from profit in an area, while users want a sustainable and livable public space. The government has a different position in this today than it did in the 1970s. Instead of playing a leading and guiding role in decision-making, the government takes a negotiating role in the background. It uses certain laws and instruments to steer development, but own development and hard steering remain absent. Urbanism today is more about connecting and stimulating than controlling and directing. (Taşan-Kok, 2010)
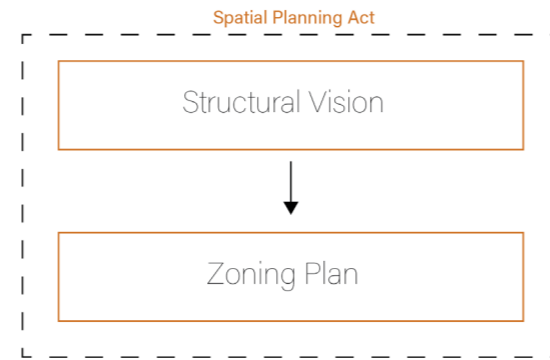
Official laws and instruments

To understand the complexity of urban planning in the Netherlands and the problems associated with it, it is important to understand the context of spatial planning. The following is an overview of this.

Spatial Planning Act

The Spatial Planning Act is the most important law for urban development in the Netherlands. It states how spatial plans should be created and which organization is responsible for what. The Spatial Planning Act is used to allocate land use for various spatial needs such as living, working, nature, mobility and recreation. Furthermore, it obliges national, provincial and municipal governments to make a Structure Vision and a Zoning Plan for urban development. These are legally binding documents, in which the government explains its policies for the urban area and contains legal standards for the area. (Overheid.nl, 2021)

Structural Vision

In the Structural Vision (Dutch: structuurvisie), the state, province and municipality explain their integral vision for their territories. The various institutions all make at least one vision for their own territory, which means that the municipality of Amsterdam makes a vision for the city as a totality. This consists of an explanation of the global strategy for the city and indicates the main outlines for future spatial development. It indicates where new developments will take place and how they will be shaped. Because it is a city-scale plan, it is not yet very specific and has a strong general character. The municipal Structural Vision is adopted by the City Council, which is democratically elected by the citizens of Amsterdam. (Overheid.nl, 2021)

Zoning Plan

The Zoning Plan (Dutch: Bestemmingsplan) derives from the Structural Vision and focuses on a smaller scale. Zoning Plans are often made for city districts and neighborhoods and are aimed at translating the Structural Vision into guiding standards and legal bases for neighborhood developments. The municipality establishes these Zoning Plans, but they can also be made by the national or provincial government and are

Figures 61: Illustration of Spatial Planning Act
(Own figure, based on overheid.nl, 2021)

then often called Integration Plans (Dutch: Inpassingsplan). The Spatial Planning Act requires municipalities to create a new Zoning Plan every 10 years, and government, businesses and citizens must test new plans against the rules of the Zoning Plan.. (Overheid.nl, 2021)

Environment Act

When a new urban initiative emerges and an actor wants permission to do so, a permit is required. Until now, the initiative had to be reviewed under 26 environmental laws, but from 2023, this will be simplified with the introduction of the Environment Act. This Environment Act will include all 26 previous laws and will allow for a single permit for urban development. This permit will be granted if the plan is consistent with the zoning plan. This emphasizes the importance of the Zoning Plan but also the Structure Plan because the Zoning Plan is based on it. (Soeterbroek, 2021)

Unofficial strategies for urban development

The laws and instruments outlined above explain the legal conditions of urban planning in the Netherlands. In addition to these legal conditions, there are also different forms of organizational structures for urban development that are not legally binding and are based more on cooperation and horizontal relationships. Especially in expensive developments, there are different organizational approaches and different forms of public-private cooperation. These forms are explained below.

Public-private partnerships

There are different types of public-private partnerships and thus different ways of shaping the complex decision-making environment. In these different forms, public and private actors cooperate in different ways. The degree of actor participation varies by type, from full public development to full private development. In the form of public development, the municipality initiates and develops it from start to finish. This gives power to the public parties, but also limits the opportunities for cooperation. In the intermediate forms, concession, coalition and joint venture, the power of private actors increases, as does their (financial) contribution. The
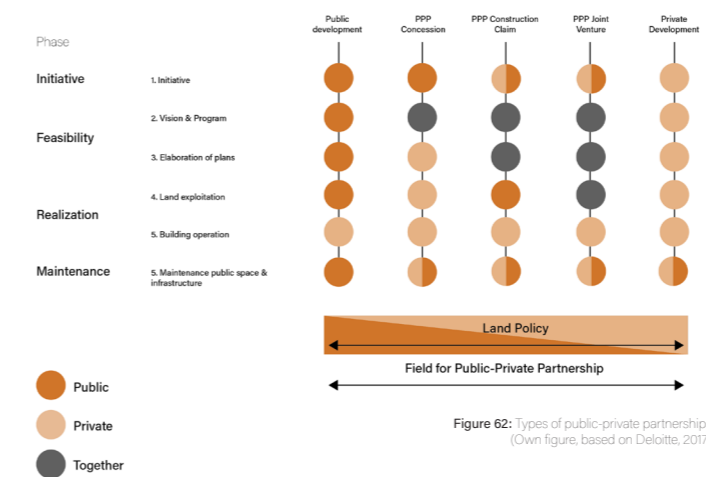

Figure 62: Types of public-private partnerships
(Own figure, based on Deloitte, 2017)

most extreme variant involves private development where the initiative and development comes entirely from private parties. (Deloitte, 2017)

Figure 65 shows that the forms described have different impacts on government power. It shows the options for development that can be chosen in the Netherlands and thus illustrates the complex decision-making field.

Democratic limitations

Now that the context of the urban (re)development process has been explained, the problems associated with it can be examined. These problems mainly concern the lack of democracy in the decision-making process and the lack of power of citizens and public actors.

As Fainstein (2011) explains in her definition and also Griffin (2018) states in his Just City Values, democratic decision-making is an important element of establishing a Just City. In this regard, it is important that citizens have the opportunity to participate in urban development and that their wishes are heard. In current Dutch urban development, this is under pressure. The following explains why.

The Spatial Planning Act requires municipalities to create a Structural Vision for their territory and various Zoning Plans flow from it. This means that the local plan flows from a large-scale plan and thus the focus is on making large-scale urban plans. The focus on the large scale makes it difficult to create context-specific plans that lead to urban justice and allow local citizens to participate in the decision-making process. The legally binding rules in the Zoning Plan stem from large-scale thinking and lack democratic decision-making by local citizens. (Soeterbroek, 2021)

Although the Environment Act seeks to merge 26 laws into one overlapping law and thereby simplify the decision-making process, it does not lead to more democratic urbanism. The purpose of the law is to make market initiatives more accessible,

and therefore the government is leaning more and more on market players and not addressing the demands of citizens. Likewise, the new law gives citizens less time to protest against a particular plan, and also the right of city councils to reject the plan is replaced by an advisory right. This shows that there is less focus on turning citizens' voices into action and increasing the power of market players. (Soeterbroek, 2021)

Finally, there are various forms of public-private partnerships. Cooperation with market parties provides advantages because private parties are often more efficient and know the market well. They can bear risks and participate financially in development. Yet, the different forms show that the more these advantages are used, the less government control and democratic decision-making occurs. These forms illustrate that democratic decision-making is under pressure when market participants participate in urban development. (Taşan-Kok, 2010)

Conclusion

Urban development in the Netherlands increasingly relies on cooperation with market parties and public-private partnerships. To protect the government's role, the legally binding Structural Vision and the Zoning Plan are established, but even these lack democratic decision-making. The upcoming Environment Act envisions more flexible plans, but speeding up the process also compromises the input of local citizens. In conclusion, bottom-up and democratic decision-making is lacking in the Dutch development process and citizens have little power over the development of their living environment.

4.2 Example of neoliberal development
Introduction

Problems related to democratic decision-making in the Dutch planning system have already been described on the previous page. To gain more insight into the influence of neoliberalism on the development process and how complex decision-making behaves in practice, the next subchapters will examine an example project. This is the example project Zuidas in Amsterdam-Zuid. Here neoliberal ideologies were applied. The goal was to attract knowledge workers to the city of Amsterdam and create a business hub of international allure. Amsterdam wanted to become compatible in the globalizing world and by attracting knowledge workers, it was thought that this would be achieved (van Loon, 2014). Development began in 1998 and it was heavily based on private property development (van Eekelen, 2014). Now the area has been criticized because the development would have resulted in a high-class environment and it is inaccessible to other Amsterdam residents. (Majoor, 2014)

Introduction to the project
Figure 66 illustrates the location of the Zuidas. It is located in the south of Amsterdam, around the Amsterdam-Zuid train station. It forms a knowledge-intensive business center and the average income is well above the average for Amsterdam as a whole (Allecijfers.nl, 2022). Many offices are located here, centered on the profession of law or finance (Allecijfers.nl, 2022). Critics say the focus on attracting knowledge workers and neoliberal thinking has created a high-class core where lower-educated individuals do not feel at home. (Major, 2014)
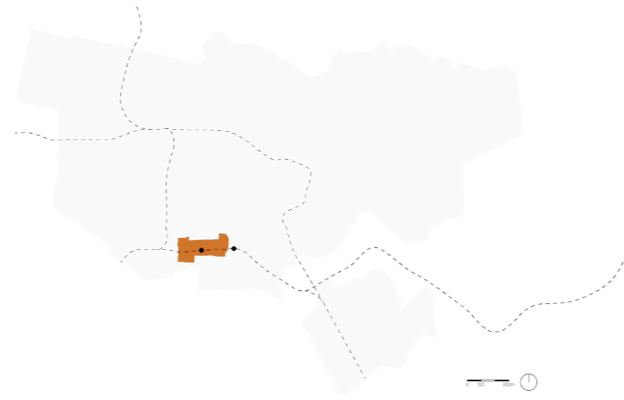
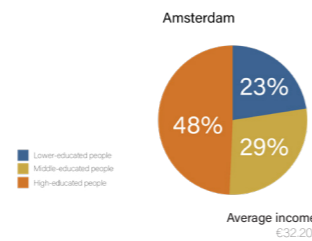**Figure 63:** Location of Zuidas station area on the map of Amsterdam

Amsterdam

23%
48%
29%

Lower-educated people
Middle-educated people
High-educated people

Average income:
€32.200

Figure 64: Population composition Amsterdam based on education level & average income (Allecijfers.nl, 2022)

Zuidas

7%
68%
25%

Average income:
€59.800

Figure 65: Population composition Zuidas based on education level & average income (Allecijfers.nl, 2022)

4%
Industry & Energy
8%
Horeca
8%
Culture & Recreation
10%
Transport, Communication & Information
35%
Business Services
35%
Financial Services & Real Estate

Figure 66: Division of offices per profession in the Zuidas (Allecijfers.nl, 2022)

Steeds meer woningen verrijzen op de Zuidas, maar zal het echte buurtgevoel ooit komen?

Figure 67: News article " More and more homes are being built on the Zuidas, but will the real neighborhood feeling ever come?" (Kruyswijk, 2022)

Levendige elitepleinen, doodse samenleving?

Figure 68: News article "lively eligist squares, dead society?" (Van Loon, 2014)

Photo 19: Impression of the Zuidas Development ('Zuidas', Stadsarchief Amsterdam/Kransberg, D, 2003, made black and white)

Photo 20: Twee torens van het project 'Amsterdam Symphony' (Vink, M, 2009, made black and white)

As outlined, the development of Zuidas has not created an inclusive and just living environment for all. The development process has played a major role in this, so it is essential to examine how this development process has performed and what can be learned from it for future developments.

Governance model
Planning in the Zuidas is done by public-private cooperation. For the development of the city area, a business model is created which is called the "Zuidasonderneming" (Zuidas company) and a consultation tool which is called the "Zuidas coalitie" (Zuidas coalition) (Projectbureau Zuidas, 2002). In these organizations, the basic rules and principles are defined as:

1. The process is driven by the municipality and this actor takes the leading role
2. To avoid too much risk, a phased development is set up
3. The municipality seeks multiple coalitions and tries to share risks and responsibilities

In the PPP (Public-Private Partnership) construction, investments are made by both public and private parties, with the private parties sharing 60% of the investment costs and the public parties 40%. For the risks, there is a state guarantee, which means that the state bears the risks in case of unexpected problems. The Zuidas business model is illustrated below. (Doets, 2006)

Problems in the public-private Zuidas development

The public-private development and neoliberal thinking of the Zuidas have led to several problems. To understand the difficulties associated with contemporary neoliberal planning, these issues are explained below. The observations come mainly from Oudenampsen (2008), who examined the problems and opportunities in the development process of the Zuidas by considering different viewpoints from different authors.

Project replaces planning
The planning strategy in the Zuidas places a strong emphasis on projects rather than planning. Large-scale integral master planning is being replaced by individual projects with their own plans. Market parties want to develop their real estate in response to market developments, so a phased approach has been chosen, with plans being adapted to contemporary developments. This compromises the integration of all projects and the area has become a patchwork of projects rather than a cohesive living and working environment. Moreover, the flexibility of the plans makes the municipality bear great risks and requires high public investments. (Oudenampsen, 2008)

Democratic shortage
Oudenampsen (2008) concludes about the democratic shortcomings of the development of Zuidas. He explains the criticism on the non-transparent alliances between government and developers. Responsibilities are not entirely clear and much happens behind closed doors. Although Majoor (2005) explains that there is an extensive organization of participation in the development of Zuidas, Oudenampsen (2008) concludes that democracy is lacking and there are problems with communication in the project. Van der Veen (2009) acknowledges this.

Dependency on private actors

In the negotiation process, the municipality experienced dependence on private actors. The goal of the Zuidas project was to attract international companies to Amsterdam and create an economic core. It was therefore important for the municipality to attract the large Dutch companies first, so that they could contribute to attracting the international companies. To this end, the municipality felt dependent on the companies and needed to keep them satisfied. This dependency gave large private parties even more power and contributed to undemocratic decision-making. (Oudenampsen, 2008)

Negative redistribution
Many public investments are made in the development of the Zuidas. This is usually done in urban development with the goal of "social return." The principle behind this is that the municipality spends money on development and the return is an increase in employment and welfare for all citizens of the urban area. In the Zuidas, a negative redistribution has been observed. The investments mainly have a return for the higher income groups in the area and the lower income groups hardly benefit from the public investments. In addition, the municipality is also breaking with traditional ground lease distribution rules. This places a financial "fence" around the Zuidas whereby all leasehold income flows back into the area and becomes privatized property of the Zuidas corporation. This money belonging to the municipality is therefore no longer available to be invested in other developments in the city. In short, a lot of money is invested in a neighborhood that primarily serves the higher income groups, and ultimately no more money is available to put into other parts of the city, thus increasing inequality. (Oudenampsen, 2008 & Swyngedouw, 2005)

The governance model and organization of the Zuidas create problems of injustice in various ways. It serves as an example of the problems of contemporary neoliberal planning and therefore draws lessons about what problems need to be solved to develop a Just City.

The public-private partnership of the Zuidas diminishes the power of the municipality and therefore limits democracy. The focus on pleasing the larger stakeholders excludes citizens from the decision-making process. Also, the financial rules ensure that the municipality bears a lot of risks and that rental income automatically flows back to the area itself. This affects the ability to redevelop other areas of the city.

Conclusion

Public Involvement — 40% — 60% — Private Involvement

Policy-making
Municipality of Amsterdam (Destination Plan)

Financial Investments
Ministry Ministry of Housing, Spatial Planning & the Environment (VROM)
Ministry of Transport, Public Works and Water Management (V&W)
Ministry of Infrastructure & the Environment (I&M, after 2010, combination of VROM & V&W)
Province of North-Holland
Amsterdam Metropolitan Area
Municipality of Amsterdam

Land Owners
Municipality of Amsterdam

Infrastructure Owners
Rijkswaterstaat
PRORAIL
Municipality of Amsterdam

Financial Investments
Private developers
Nederlandse Spoorwegen (Dutch Railways)

"Zuidasonderneming"
Zuidas Company

Composer BV
Company established for the development of infrastructure

Policies & Rights — Finances — Finances — Station development — Land — Station land — Infrastructure — Functional Demands
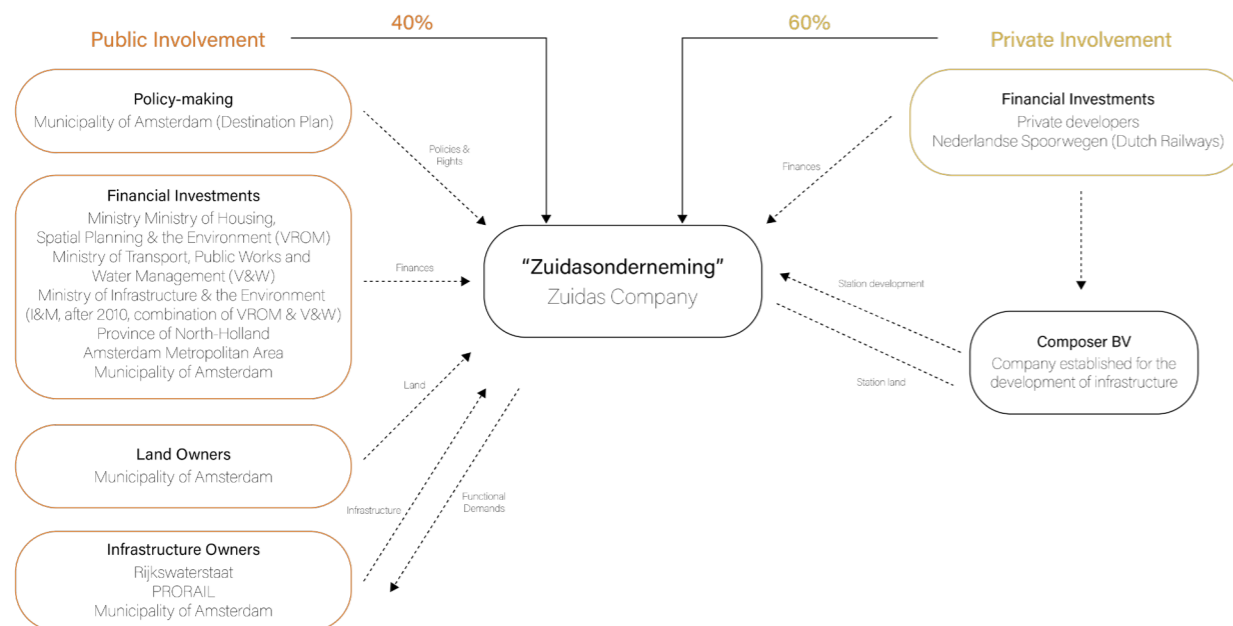
Figure 69: Structure Zuidasonderneming (Doets, 2006)

4.4 Example of neoliberal development Process

The previous pages have already illustrated the main problems of the neoliberal development process of the Zuidas. In addition, the timeline besides illustrates other problems that arise during the development of this area. The example of the Zuidas shows the complex and unpredictable process and the problems associated with it are explained below.

The Zuidas can be seen as a complex development because it involves not only major real estate and public space developments, but also large infrastructural interventions. That is why the timeline on the right shows the timeline of the infrastructural developments on the one hand and the real estate developments on the other. The orange box in the middle summarizes the development of both.

Looking at the development of infrastructure in the Zuidas, it can be seen that the plans changed several times during the process. Initially, there was a clash between public actors, namely the municipality and the state. This delayed the creation of the plans by 6 years (between 1998 and 2004). After that, private parties entered the development process, but this eventually failed due to an economic crisis. Eventually, the plans had to be changed and the initial idea to tunnel both the highway and the train tracks was replaced by a plan to tunnel only the train tracks. The end result was that public actors had to pay for the entire operation, while the goal of reducing infrastructural barriers in the area was not fully achieved. Thus, a lot of public investment was spent on an intervention from which not everyone could benefit. What can be learned from this is that urban development requires fixed plans, which private actors cannot avoid. Furthermore, public actors should not bear too many risks. (van Eekelen, 2014)

The real estate development side also provides lessons for the development of a Just City. The timeline shows that in the very beginning, in 1998, the emphasis was on large-scale and project-based development. Major financial players determined how the Zuidas should be shaped and were focused only on developing their own plot of land. Little attention was paid to community-building and public space development. In 2010, that changed and planners began to see the importance of "soft planning". Although the attention grew, critics still argue that the city is failing to do so today because the human scale is lacking and there is little identity in the area. This teaches that planning for a Just City means paying attention to the human scale and temporary (soft) planning. Community-building must be protected and project-based development must be replaced by planning-based development. (van Eekelen, 2014)

Conclusion
In conclusion, there are lessons to be learned from the Zuidas development process. While for large-scale infrastructural interventions it is important to draw up fixed plans, for the development of public space the human scale must be protected. Project-based development should be replaced by plan-based development, and public actors should not bear excessive risks.
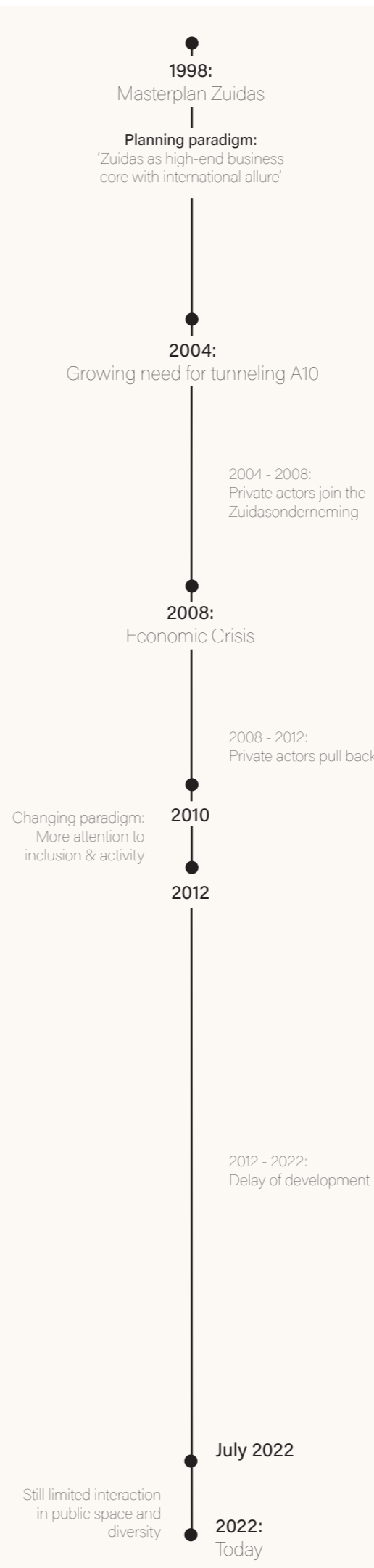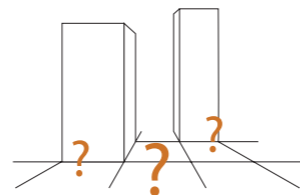
Big-scale and project-based master planning

1998:
Masterplan Zuidas

Planning paradigm:
'Zuidas as high-end business core with international allure'

Municipal initiative to tunnel A10 with PPP, state and province not enthusiastic

2004:
Growing need for tunneling A10

Enthusiasm of state for tunneling with financing through PPP grows

Creation of the Zuidasonderneming

2004 - 2008:
Private actors join the Zuidasonderneming

Plan to tunnel A10 & train

2008:
Economic Crisis

2008 - 2012:
Private actors pull back

Changing paradigm: More attention to inclusion & activity

2010

2012

Private actors have pulled back from public-private partnership

New plan between state, municipailty, province & region

More attention to "soft planning"

2012 - 2022:
Delay of development

July 2022

Public actors came to an agreement

A10 Underground, train above the ground

Still limited interaction in public space and diversity

2022:
Today

Costs:
State: €1 billion
Province: €200 million
Region: €200 million
Municipality: €200 million

Now that the development process has been examined, the actors and their power over the development process will also be explored. In order to draw lessons for the development of Just Cities, these power structures must be investigated so that a vision of how things should be done in future development, can be developed.

An overview of the actors involved in major developments such as the Zuidas is presented. Their interests, responsibilities and instruments to steer urban development are illustrated. Information is obtained about the power field and interests in neoliberal urban development.

The actors involved in large-scale developments such as the Zuidas can be divided into five categories. These are public actors, users, private parties, infrastructural developers developing highways, rail lines and stations, and advisors/activists. These actors all have different interests. For instance, the municipality is more focused on developing a livable and sustainable public space, while the private developers mainly seek profit.

Besides the interests, the responsibilities of each actor are listed below. Some actors have legal responsibilities. For instance, the municipality must translate citizens' needs into reality and private developers must align their developments with the Zoning Plan.

Finally, there are also instruments through which actors can control the decision-making process. Public actors have the Zoning Plan and the Structural Vision as instruments, and private parties have financial investments as instruments. Users and activists have the least influence. The only steering instrument they have is to visit in participatory events.

Figure 71: Actors involved in the development process of Zuidas, their interests, responsibilities & intstuments

Own fiure, based on:
Rekenkamer Amsterdam (2009)
Oudenampsen (2008)
Bosma (2015)
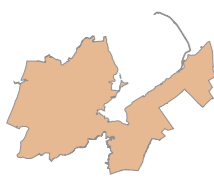van der Veen (2009)
van Eekelen (2014)

Public Actors · Users · Private Parties · Infrastructural developers · Specialists & Activists

4.6 Example of neoliberal development
Power-interest matrix

The various actors from the previous page do not all have the same power or interest in urban (re)development. The power-interest matrix below shows how much power each actor had in the development of Zuidas and how much interest.

It can be seen that the municipality and private developers had the most interest and power in the development. This made them the major players. The state and the province had less interest and, as the timeline showed, this caused delays in the development process. It can also be seen that important actors, such as users and activists, had a lot of interest in the development but little power.

Conclusion
The power-interest matrix shows that it is important to bring power to users in the process and put them at the center of development. It is also important for private developers to have less power and for the municipality to retain power, but always keep the interests of citizens in mind. Finally, it is important that public actors are on the same page so that there is not too much delay.

PD Private Developer	**C** Citizens
E Small-Scale Entrepeneurs	**W** Workers
HA Housing Association	**T** Travelers
M Municipality	**V** Visitors/Tourists
S State	**A** Activists
P Province	**D** Designers
R Region (MRA)	
Pr ProRail	
NS Dutch Railway Company	
RWS Rijkswaterstaat	

4.7 Example of neoliberal development
Relations & collisions

The illustration below says something about the relationships and clashes between stakeholders in the Zuidas development process.

The black lines show strong relationships and relationships that protect each other. For example, the municipality protects citizens and ProRAIL and NS are for travelers. On the other hand, there are also colliding relations. For instance, the developer wants to make a profit, while the environmentalist wants a sustainable and therefore costly development.

Conclusion
The figure teaches a lot about how to plan a Just City in the future. It shows that private developers clash with many important actors, such as users and activists. This demonstrates the need to limit their power and protect the users. It also shows how the municipality should protect the citizens and workers during the process, but it could be said that during the development it may have only paid attention to the (knowledge) workers. This further emphasizes that the municipality needs to be well aware of the needs of its citizens and use its power properly.

Positive relation

Colliding relation

4.8 Current strategy in Amsterdam

After reviewing the example project Zuidas and the problems of neoliberal urban development in the past, it is useful to examine how the municipality sees future urban development. For this purpose, a strategy for new development is examined, namely the development of Haven-stad in northwestern Amsterdam. This development also includes a station and infrastructure, and therefore costly interventions. Therefore, it functions as a good example of Amsterdam's current strategy. (Gemeente Amsterdam, 2017)

Market-oriented approach

The Development Strategy (Dutch: Ontwikkelstrategie) for Haven-stad learns us about the municipal approach for future development. In this document, the focus is on a market-oriented approach and a realization by market parties. The municipality plays hereby a facilitating role and sets out the conditions for the development. This gives a lot of power to private actors and limits democratic power. The municipality behaves hereby not differently than in the Zuidas development. (Gemeente Amsterdam, 2017)

Phased approach

In addition to the market-oriented approach, the municipality is also considering a phased approach to the development of Haven-stad. This phased approach allows for changes in market conditions and for flexibility. While this flexibility does indeed accommodate changing social needs, it also makes the municipality vulnerable. As seen with the Zuidas development, private parties withdrew when economic changes occurred and this led to a situation where public parties had to complete the realization and assume all risks. Since the Haven-stad development also involves large (infrastructural) investments, the flexible and phased approach creates new vulnerabilities for the public parties and thus for the citizens. Fixed contracts are needed for the development and shared risks are required. (Gemeente Amsterdam, 2017)

Democratic limitations

Finally, in the Development Strategy for Haven-stad nothing is written about democratic inclusion and participation by users and activists. While there will be participatory events and surveys, the core of the strategy is not to develop a democratic process. This shows the democratic limitations of present-day urbanism in Amsterdam. Not only are the powers of public parties limited, but also the inclusion and participation of users are barely created. (Gemeente Amsterdam, 2017)

Conclusion

The Development Strategy for Haven-stad in Amsterdam forms an illustration of how urban (re)development is being approached today in the capital city. It shows that the strategy doesn't differ much from the development of the Zuidas and it became already appearant that the development of Zuidas does not meet all the requirements of a Just City. Now it turns out that also the contemporary planning approach of the city of Amsterdam limits spatial justice and democratic decision-making.

Figure 74: Vision for city part Haven-stad (Gemeente Amsterdam, 2017)

4.9 Conclusion

This chapter answered the research question:

Which problems arise in the planning process, how is it organized and what can we learn from existing neoliberal developments?

Urban development in the Netherlands
Since the paradigm shift of the 1970s, more market parties have been involved in urban decision-making. Although the municipality still has strong powers with the mandatory Structure Vision and the Zoning Plan, there has been an increase in public-private partnerships. In theory, this public-private partnership (PPP) leads to more benefits because the knowledge and financial capabilities of market parties are combined with the powers of public actors. Yet, PPP also leads to more complex decision-making and a loss of democratic power. Also, along with the Zoning Plan, the Structural Vision lacks democratic power of local citizens. Therefore, it can be concluded that neoliberal urban decision-making environment risks democracy and civic inclusion. (Soesterbroek, 2021 & Taşan-Kok, 2010)

Zuidas as example project
To gain more insight into how neoliberal developments behave in practice, the Zuidas Station Development is examined as an example. In this reference study, it became clear that there was a lack of democracy and that public actors had limited power during decision-making. Furthermore, public money was spent on the project with the hope that it would flow back to all city residents. Ultimately, this did not happen and only high-income citizens using the Zuidas benefited from the investment. (Oudenampsen, 2008 & van der Veen, 2009)

The Zuidas timeline also shows how the neoliberal planning paradigm influenced the development. It showed how PPP emerged, but also how it proved too vulnerable to economic change. Ultimately, the plan to tunnel the A10 with public-private partnerships failed and the intervention to reduce infrastructural barriers in the city could not be realized. As a result, local residents could not benefit from the development of the Zuidas while much public money was spent on it. The timeline illustrated as well how the neoliberal planning paradigm led to project-based and large-scale development without attention to "soft" planning. This is another example of how Zuidas has not develop a district that meets all requirements for spatial justice and inclusion. (van Eekelen, 2014)

Actors & interests
The stakeholder analyses of this chapter illustrated the complex decision-making environment of urban development. It showed that there are many stakeholders and that the actual users of the area have little power in decision-making. Likewise, it showed that there are many conflicting interests among stakeholders, making the process increasingly complex. In order to create a Just City, it is necessary to make the decision-making process more democratic and give more power to both users and public actors.

Contemporary urban planning in Amsterdam
The chapter ended with an elaboration of how the development process in contemporary urban planning is approached by the municipality of Amsterdam. It shows that the negotiation process is still strongly market-oriented, with the municipality taking a negotiating role in the background (Gemeente Amsterdam, 2017). Furthermore, there is a phased approach and democratic involvement is limited. Thus, the approach is not significantly different from the neoliberal approach and a new strategy for the revival of the contemporary Just City, is needed.

Conclusions
It can be said that there are currently many problems in the development process in Amsterdam, regarding spatial justice. The Netherlands' urban development system currently lacks democratic power and the current approach is market-oriented. This is worrying because the Zuidas development has shown that this does not lead to democratic and fair urban development. Also, development stakeholders do not have equal powers and often clash. It can be concluded that the current development system does not meet the requirements of a Just City and a new strategy is needed.

As summary, the main conclusions of this chapter are stated besides.

Conclusions chapter 4

Stakeholder analyses

The Dutch urban development system lacks democratic power. Citizens barely have power in the system while they have big interests. Also, the power of public parties is often limited.

The obligated structural visions are often being made on a city scale and therefore not context-specific. The zoning plans are made on a smaller scale but derive from the bigger structural vision. *Because the structural vision is not context-specific and made on a big scale, it is hard to include local citizens' wishes and therefore the system is lacking local democratic power.*

The decision-making process is complex. There are many stakeholders involved whose interests often collide. *In order to create a Just City, a simplified system with bigger public powers is needed.*

The Zuidas development has shown that public-private partnerships are vulnerable to economic fluctuations. In order to create security and a Just City, *it's important to create fixed contracts with private parties so that public actors don't carry too much risk.*

Many decisions stay behind closed doors, which doesn't give population groups the chance to protest. *In order to create a Just City, more transparency is needed in the development process.*

In the Zuidas development, private actors pulled back and this has led to a negative redistribution. A lot of government investments have gone into the process but this didn't return to all city dwellers. *In a Just City, it is needed that everyone can benefit from public investments.*

The Zuidas shows that neoliberal planning leads to project-based developments and a lack of 'soft' planning. *In order to restore spatial justice, it is needed that development happens planning-based again and that there is attention to soft planning and temporary development.*

The stakeholder analyses show that those without a voice weren't always protected during the development process. An example of this is the protection of nature. *For the development of a Just City, it is important that those without a voice are protected.*

General conclusion

The current plans for the developments in Amsterdam are very market-oriented and project based. Action is required in order to not create a similar development as Zuidas.

Table 5: Conclusion table chapter 4

5. Methodology for a Just City

Chapters 3 and 4 provide the analyses for this study. From these, planning and design conclusions were derived, which come together in the methodology introduced in this chapter. This chapter explains a Just City Framework that is the starting point for the methodology. How the Framework works and how the conclusions from previous chapters land within it are elaborated. Subsequently, it explains a step-by-step method by which the principles can be translated into a concrete design that meets the needs of a Just City. The chapter describes how the method works and elaborates on the role of the Just City Framework. Finally, an elaboration of the method in practice is provided.

The research question that will be answered in the coming chapter is:

What frameworks and models are included in a methodology that allows one to grasp the concept of a Just City and plan and design for it?

The chapter ends with a conclusion in which this research question will be answered.

Photo 21: ' Werkbezoek van koningin Juliana aan de Oostelijke Eilanden (Kattenburg en Wittenburg), onder begeleiding van burgemeester Samkalden' (Stadsarchief Amsterdam/ Capital Press & Photo Productions BV, 1975)

5.1 A Just City Framework
Introduction

The next chapter outlines a methodology by which the concept of a Just City can be understood. An important part of this methodology is the creation of a Just City Framework. The following explains how this framework is set up and how it works.

Goal of the Just City Framework

Chapter 2 made the observation that there is no set definition for the term Just City. The chapter noted that many writers emphasize that it is difficult to provide a set definition because it is important that citizens can form a Just City for themselves and it is always context-specific (Griffin, 2018 & Rocco et al., 2021). Nevertheless, since this chapter seeks to create a methodology that enables the planning of a Just City, it is important to gain a solid understanding of the term. Therefore, the knowledge from previous chapters has been translated into a Just City Framework. This is a useful model that contributes to a new methodology for planning a Just City. The purpose of the framework is to establish a tangible model which allows grasping the Just City concept. It is important to emphasize that the framework should not be considered finished and is adaptable to context-specific circumstances. It helps to understand the concept of a Just City, while also allowing local citizens to shape this concept themselves.

Structure of the Just City Framework

The Just City Framework is a framework that translates the perspectives of various writers on the concept of a Just City and the conclusions of chapters 3 and 4 of this thesis into a concrete model. This framework provides concrete planning and design principles that serve to develop a strategy for transforming urban areas into a Just City. The specific purpose of the framework is to create a spatial understanding of the concept of a Just City and to provide concrete design and planning instruments to pursue it.

The outline of the Just City Framework is illustrated to the right. It is a circle divided into 9 equal parts. These parts all represent an "Element of Urban Form" and therefore the premise of the Framework is spatially oriented. Examples of these elements are "character," "enclosure" or "movement" (Al-Harami & Furlan, 2019). The second circle links these Elements of Urban Form to Just City Values, created by Griffin (2018). The third circle illustrates planning and design principles arising from the conclusions of Chapters 3 and 4, from the literature, or from directly linking the Element of Urban Form to Just City Values. Finally, the last circle summarizes the planning and design principles from the third circle and provides a guiding strategy for the certain Element of Urban Form to create a Just City environment.

The next pages explain the framework in more detail.

Figure 75: Abstract illustration of the Just City Framework

5.1 A Just City Framework
Introduction

Reading the Framework

As mentioned, the Just City Framework consists of several circles with different contributions to the concept of Just City. The purpose of the framework is to create a spatial understanding of how to design a Just City and therefore, it is important to use the Elements of Urban Form as a starting point. For the framework, the inner circle was chosen to begin with 9 Elements of Urban Form. These are based on Al-Harami & Furlan (2019), while the 9th, Development Process, is added to this. This is because the development process is an important part of urban transformations in a Just City. The Elements of Urban Form are:

1. Continuity & Legibility
2. Character
3. Enclosure
4. Activity & Use
5. Quality of the Public Realm
6. Mixture (Diversity)
7. Movement
8. (Climate) Adaptation
9. Development Process

In the second circle, a personal interpretation is made. Just City values, created by Griffin (2018), are linked to the Elements of Urban Form. The question that is being asked here can be stated as "*Which Just City Values can be realized through the organization of this certain Element of Urban Form?*". An example is given below. The element Mixture (Diversity) is taken and the question "Which Just City Values can be realized through the organization of Mixture (Diversity)?" is being asked. It could, for example, be argued that the value of "Acceptance" could be realized by creating mixture and diversity in urban form, because mixture creates a feeling of community and belonging. This example shows that the second circle derives instantly from finding an intuitive relation between the Elements of Urban Form based on Al-Harami & Furlan (2019) and the Just City Values from Griffin (2018).

The third circle forms the most important circle of the framework. While the Elements of Urban Form (circle 1) and the Just City Values (circle 2) are not yet bringing an active strategy for creating a Just City, the third circle is stating strategic planning and design principles. This circle combines the Elements of Urban Form with Just City Values and creates tangible and spatial design and planning principles. These principles are created in different ways. Some of them derive directly from combining the Element of Urban Form with Just City Values. Here, there is a "+ relation" between the first and the second circle. An example of this is: 'Mixture (Diversity)' + 'Fairness' = '*Develop mixed-use and accessible housing and functions for all*'. The principle derives directly from finding q relation between an Element of Urban Form and a Just City Value. Other principles derive from the research done in chapters 3 and 4. Knowledge from historical, data, or stakeholder analyses is translated into planning and design principles and can be included in the framework. These principles, based on research, help to realize certain values through a certain Element of Urban Form. An example of this is the principle "*Leave space for small-scale initiatives during the development process*". This principle includes lessons learned from analyses of the example project Zuidas (chapter 4). Here, the lesson was that there should be more space for small-scale initiatives in order to create a mixed-use area that meets the needs of all. The principle "*Leave space for small-scale initiatives during the development process*" derives from this lesson and can be realized through the Element of Urban Form 'MIxture (Diversity)'. It hereby contributes to the Just City Values of Fairness, Choice, and Rights.

Overall the relation between the first, second, and third circles can be seen as an addition and the fourth circle is a summarization. The framework can very well be explained as a mathematical formula: the first circle + the second circle = the third circle = the fourth circle.

Figure 76: Readability of the Just City Framework

Knowledge leading strategy:
Summarization of circle 3
(personal interpretation)

Knowledge Planning & Design Principles:
Chapters 3&4
Literature
Own interpretation of linking Elements of Urban
Form with Just City Values

Knowledge Just City Values:
Griffin, T. L. (2014) 14 Contested Spaces. Space
Unveiled: Invisible Cultures in the Design Studio, 143.

Knowledge Elements of Urban Form:
Al-Harami, A, & Furlan, D. R. (2018). The urban fabric of
Al Zubarah city: Unveiling an urban regeneration vision
for modern urbanism in Qatar. Journal of Urban
Regeneration & Renewal, 12(2), 151-176.

Figure 77: References used for the development of the Just City Framework

Urban Form Principles
- Character
- Continuity and enclosure
- Quality of the public realm
- Movement
- Legibility
- Adaptability
- Diversity
- Sustainability

Figure 78: Elements of Urban Form, from Al-Harami & Furlan (2019)

The picture above illustrates again the different circles of the Just City Framework and gives an overview of the references used to develop this model. The first circle, the Elements of Urban Form, are based on the principles that Al-Harami & Furlan (2019) use in their paper, in which they research an urban regeneration plan for Al Zurabah City. The elements on which the ones used in this report are based are shown in Figure 80.

The second circle, states the Just City Values which can be fulfilled through that certain Element of Urban Form. These values come from an important researcher of Just Cities, namely Griffin (2018).

The third circle is a combination of information. Some of the principles in this circle derive from the information given in chapters 3 and 4, while others derive from important literature or a combination of an Element of Urban Form with a Just City Value. An overview of which element derives from which knowledge is given on pages 92 to 99.

The fourth circle is an own summarization of the planning and design principles of circle 3.

Figure 79: Just City Values, from Griffin (2018)

5.2 A Just City Framework
Contribution chapter 3

As stated before, the planning and design principles of the third circle of the Just City Framework derive from the research in chapters 3 and 4, from the literature, or from finding a connection between Elements of City Form and Just City Values. The following pages describe exactly where the planning and design principles come from and the conclusions from which they emerge, beginning with the contribution of chapter 3.

At the end of chapter 3, a list of conclusions was provided about the historical and data analyses. The table below represents these conclusions and shows how they affect certain Elements of Urban Form. The planning and design principles resulting from the conclusions are listed in the last column of the table. Where exactly they recur is shown in the table to the right. Table 7 is a listed visualization of the Just City Framework.

Table 6: Conclusion table chapter 3 with planning & design principles that derive from it

Element of Urban Form	Just City Values	Planning or Design Principle
Continuity & Legibility	Mobility Choice Acceptance Identity	Develop routing of accidentally meeting
		Develop coherence in routing and orientation
		Develop coherence in architecture and building style
		Create landmarks for orientation
		Create (functional) cores and routes leading there
		Limit (infrastructural) barriers in the area
Character	Acceptance Aspiration Choice Identity	Develop places of belonging
		Develop places of inspiration & creativity
		Develop places of spontaneity
		Create coherence between citizens
		Pay attention to 'soft' planning and temporary urbanism
		Develop places of identity
Enclosure	Acceptance Engagement Welfare	Develop safe places
		Create coherence and work on community-building
		Develop social safety
		Create privacy for citizens & other users
		Protect the human scale in the design
		Find a right balance between public, semi-public & private space
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses
		Develop cores where different uses come together
		Facilitate community-building and urban participation
		Develop mixed-use and protect the development of diverse housing & functions
		Develop places of spontaneous use and interaction
		Develop unprogrammed places
		Allow users to participate in the development of places
		Create access to necessities for all
		Do temporary development that allows space to adjust to changes in uses
		Allow a diverse economy to grow and create a diversity of jobs
Quality of the Public Realm	Identity Mobility Resilience Welfare	Develop qualitative and healthy places, mentally & physically
		Develop places of character but with attention to own interpretation
		Develop accessible and connecting places, with special attention to slow traffic
		Develop sustainable and healthy places
		Develop nature-based public places and create a right balance between building density and public space
Mixture (Diversity)	Acceptance Choice Engagement Fairness Power Rights	Develop mixed-use and diverse housing and functions
		Create access to good housing for everyone
		Create social & spatial adaptability by doing temporary development
		Attract different population groups to the area
		Create a fair distribution of resources
		Develop an environment that creates tolerance and coherence
		Leave space for small-scale initiatives during the development process
		Develop regulations that promote fair housing and functions
		Create and stimulate job opportunities for all and economic progress
Movement	Choice Mobility Welfare	Develop walkable and bikeable areas
		Create connections that serve a bigger area
		Create cores and routing towards them
		Invest in public transport connections and demotivate car-use
		Develop continuous landscapes without barriers
		Create safe movement
		Create movement flows that stimulate interaction and meeting
(Climate) Adaptation	Resilience Welfare	Develop sustainably and climate adaptive
		Develop nature-based
		Develop efficient building and transport
		Re-use buildings and building materials
		Develop sustainable and comfortable buildings that create good living and working conditions
		Give a voice to nature in the decision-making process
Development Process	Acceptance Choice Democracy Engagement Fairness Power Rights Welfare	Allow bottom-up development
		Place users centrally in the decision-making
		Protect those without a voice during the development process
		Pay attention to temporary urbanism
		Bring opportunities for citizens to protest and debate
		Give public actors bigger powers than private actors
		Allow everyone to benefit from public investments & develop cost-efficiently
		Let private actors contribute to urban quality (with fixed contracts)
		Create transparent and fair processes

Table 7: Just City Framework
Planning and design principles coming from conclusions of chapter 3 are highlighted

5.3 A Just City Framework
Contribution chapter 4

Chapter 4 also provided input to the Just City Framework. The chapter ended with a list of conclusions that can again be linked to certain Elements of Urban Form and the associated Just City Values. The last column of table 8 shows how the conclusions are translated into concrete planning and design principles, In addition, table 9 shows how and where they appear in the Just City Framework.

Table 8: Conclusion table chapter 4 with planning & design principles that derive from it

Conclusion Chapter 4	Element of Urban Form	Just City Values	Planning or Design Principle
Stakeholder & Development Analyses			
The Dutch urban development system lacks democratic power. Citizens barely have power in the system while they have big interests. Also, the power of public parties is often limited.	Development Process Mixture (Diversity) Activity & Use (Climate) Adaption	Democracy Choice Engagement Power Rights	Place users centrally in the decision-making Bring opportunities for citizens to protest and debate Give public actors bigger powers than private actors Create a fair distribution of resources Develop regulations that promote fair housing and functions Allow users to participate in the development of places Give a voice to nature in the decision-making process
The obligated structural visions are often being made on a city scale and therefore not context-specific. The zoning plans are made on a smaller scale but derive from the bigger structural vision. *Because the structural vision is not context-specific and made on a big scale, it is hard to include local citizens' wishes and therefore the system is lacking local democratic power.*	Development Process Activity & Use	Democracy Choice Engagement Power Rights	Place users centrally in the decision-making Bring opportunities for citizens to protest and debate Allow users to participate in the development of places Allow bottom-up development Give a voice to nature in the decision-making process
The decision-making process is complex. There are many stakeholders involved whose interests often collide. *In order to create a Just City, a simplified system with bigger public powers is needed.*	Development Process	Democracy Power Rights	Give public actors bigger powers than private actors Bring opportunities for citizens to protest and debate
The Zuidas development has shown that public-private partnerships are vulnerable to economic fluctuations. In order to create security and a Just City, it's important to create fixed contracts with private parties so that public actors don't carry too much risk.	Development Process	Democracy Power Rights	Let private actors contribute to urban quality (with fixed contracts) Allow everyone to benefit from public investments & develop cost-efficiently
Many decisions stay behind closed doors, which doesn't give population groups the chance to protest. *In order to create a Just City, more transparency is needed in the development process.*	Actvity & Use Mixture (Diversity)	Democracy Engagement Power Rights	Create transparent and fair processes
In the Zuidas development, private actors pulled back and this has led to a negative redistribution. A lot of government investments have gone into the process but this didn't return to all city dwellers. *In a Just City, it is needed that everyone can benefit from public investments.*	Continuity & Legibility Movement Mixture (Diversity)	Democracy Power Fairness Welfare Rights	Allow everyone to benefit from public investments & develop cost-efficiently
The Zuidas shows that neoliberal planning leads to project-based developments and a lack of 'soft' planning. In order to restore spatial justice, *it is needed that development happens planning-based again and that there is attention to soft planning and temporary development.*	Character Use & Activity Mixture (Diversy) Development Process	Democracy Choice Engagement Power Rights Welfare	Allow bottom-up development Pay attention to temporary urbanism Allow users to participate in the development of places Do temporary development that allows space to adjust to changes in uses Create social & spatial adaptability by doing temporary development
The stakeholder analyses show that those without a voice weren't always protected during the development process. An example of this is the protection of nature. *For the development of a Just City, it is important that those without a voice are protected.*	(Climate) Adaptation Development Process	Democracy Power Engagement Rights	Give a voice to nature in the decision-making process Protect those without a voice during the development process

Element of Urban Form	Just City Values	Planning or Design Principle
Continuity & Legibility	Mobility Choice Acceptance Identity	Develop routing of accidentally meeting
		Develop coherence in routing and orientation
		Develop coherence in architecture and building style
		Create landmarks for orientation
		Create (functional) cores and routes leading there
		Limit (infrastructural) barriers in the area
Character	Acceptance Aspiration Choice Identity	Develop places of belonging
		Develop places of inspiration & creativity
		Develop places of spontaneity
		Create coherence between citizens
		Pay attention to 'soft' planning and temporary urbanism
		Develop places of identity
Enclosure	Acceptance Engagement Welfare	Develop safe places
		Create coherence and work on community-building
		Develop social safety
		Create privacy for citizens & other users
		Protect the human scale in the design
		Find a right balance between public, semi-public & private space
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses
		Develop cores where different uses come together
		Facilitate community-building and urban participation
		Develop mixed-use and protect the development of diverse housing & functions
		Develop places of spontaneous use and interaction
		Develop unprogrammed places
		Allow users to participate in the development of places
		Create access to necessities for all
		Do temporary development that allows space to adjust to changes in uses
		Allow a diverse economy to grow and create a diversity of jobs
Quality of the Public Realm	Identity Mobility Resilience Welfare	Develop qualitative and healthy places, mentally & physically
		Develop places of character but with attention to own interpretation
		Develop accessible and connecting places, with special attention to slow traffic
		Develop sustainable and healthy places
		Develop nature-based public places and create a right balance between building density and public space
Mixture (Diversity)	Acceptance Choice Engagement Fairness Power Rights	Develop mixed-use and diverse housing and functions
		Create access to good housing for everyone
		Create social & spatial adaptability by doing temporary development
		Attract different population groups to the area
		Create a fair distribution of resources
		Develop an environment that creates tolerance and coherence
		Leave space for small-scale initiatives during the development process
		Develop regulations that promote fair housing and functions
		Create and stimulate job opportunities for all and economic progress
Movement	Choice Mobility Welfare	Develop walkable and bikeable areas
		Create connections that serve a bigger area
		Create cores and routing towards them
		Invest in public transport connections and demotivate car-use
		Develop continuous landscapes without barriers
		Create safe movement
		Create movement flows that stimulate interaction and meeting
(Climate) Adaptation	Resilience Welfare	Develop sustainably and climate adaptive
		Develop nature-based
		Develop efficient building and transport
		Re-use buildings and building materials
		Develop sustainable and comfortable buildings that create good living and working conditions
		Give a voice to nature in the decision-making process
Development Process	Acceptance Choice Democracy Engagement Fairness Power Rights Welfare	**Allow bottom-up development**
		Place users centrally in the decision-making
		Protect those without a voice during the development process
		Pay attention to temporary urbanism
		Bring opportunities for citizens to protest and debate
		Give public actors bigger powers than private actors
		Allow everyone to benefit from public investments & develop cost-efficiently
		Let private actors contribute to urban quality (with fixed contracts)
		Create transparent and fair processes

Table 9: Just City Framework
Planning and design principles coming from conclusions of chapter 4 are highlighted

5.4 A Just City Framework
Other contributions

As outlined, many of the planning and design principles were derived from the research in chapters 3 and 4, but there are also principles that come from relating the Elements of Urban Form directly with the Just City Values of Griffin (2018). An example is the Element of Urban Form "Character" which is related to the Just City Value "Identity." From here, automatically flows the design principle "Develop places with identity." Below is an overview of the planning and design principles established in this way.

Element of Urban Form	Just City Values	Planning or Design Principle	Combination of Element of Urban Form + Just City Value
Continuity & Legibility	Mobility Choice Acceptance Identity	Develop routing of accidentally meeting	Continuity & Legibility + Sponaneity
		Develop coherence in routing and orientation	Continuity & Legibility + Mobility
		Develop coherence in architecture and building style	Continuity & Legibility + Engagement
		Create landmarks for orientation	Continuity & Legibility + Identity
Character	Acceptance Aspiration Choice Identity	Develop places of belonging	Character + Acceptance
		Develop places of inspiration & creativity	Character + Aspiration
		Develop places of spontaneity	Character + Choice (Spontaneity)
		Develop places of identity	Character + Identity
Enclosure	Acceptance Engagement Welfare	Develop safe places	Enclosure + Welfare
		Create privacy for citizens & other users	Enclosure + Welfare
		Develop social safety	Enclosure + Welfare + Acceptance
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses	Activity & Use + Choice + Aspiration
		Develop places of spontaneous use and interaction	Activity & Use + Aspiration + Engagement
		Develop unprogrammed places	Activity & Use + Choice (Spontaneity)
Movement	Choice Mobility Welfare	Develop walkable and bikeable areas	Movement + Mobility
		Create safe movement	Movement + Welfare
(Climate) Adaptation	Resilience Welfare	Develop sustainably and climate adaptive	(Climate) Adaptation + Resilience

Table 10: Just City Framework
Planning and design principles coming from finding an intuitive relation between Elements of Urban Form and Just City Values are highlighted

5.4 A Just City Framework
Other contributions

Finally, literature also contributes to the development of the Just City Framework. In "A Manifesto for a Just City" (2021), Rocco et al. set forth several perspectives on the Just City. For example, Papi et al. (page 238) define a Just City as a combination of four other concepts, namely the healthy city, the productive city, the affordable city and the shared city. These concepts include principles that are useful and contribute to the Just City Framework.

The Project for Public Spaces (n.d.), has also created a framework outlining a set of core values and principles that make successful places. This literature contribution also serves as input to the Just City Framework.

In the visualization of the Just City Framework of table 11, the principles that emerge from literature are highlighted and provided with source citations.

Figures 80 to 84: City concepts from Papi et al. (2019)
From Rocco et al. (2019), page 238

What Makes a Great Place?

Project for Public Spaces

Figure 85: Framework from Project for Public Spaces (n.d.)

Element of Urban Form	Just City Values	Planning or Design Principle	
Continuity & Legibility	Mobility Choice Acceptance Identity	Develop routing of accidentally meeting	
		Develop coherence in routing and orientation	
		Develop coherence in architecture and building style	
		Create landmarks for orientation	
		Create (functional) cores and routes leading there	
		Limit (infrastructural) barriers in the area	
Character	Acceptance Aspiration Choice Identity	Develop places of belonging	
		Develop places of inspiration & creativity	
		Develop places of spontaneity	
		Create coherence between citizens	
		Pay attention to 'soft' planning and temporary urbanism	
		Develop places of identity	
Enclosure	Acceptance Engagement Welfare	Develop safe places	
		Create coherence and work on community-building	
		Develop social safety	
		Protect the human scale in the design	Project for PS (n.d.)
		Find a right balance between public, semi-public & private space	Papi et al. (2021)
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses	
		Develop cores where different uses come together	
		Facilitate community-building and urban participation	
		Develop mixed-use and protect the development of diverse housing & functions	
		Develop places of spontaneous use and interaction	
		Develop unprogrammed places	
		Allow users to participate in the development of places	
		Create access to necessities for all	
		Do temporary development that allows space to adjust to changes in uses	
		Allow a diverse economy to grow and create a diversity of jobs	
Quality of the Public Realm	Identity Mobility Resilience Welfare	Develop qualitative and healthy places, mentally & physically	Papi et al. (2021)
		Develop places of character but with attention to own interpretation	
		Develop accessible and connecting places, with special attention to slow traffic	
		Develop sustainable and healthy places	Papi et al. (2021)
		Develop nature-based public places and create a right balance between building density and public space	Papi et al. (2021)
Mixture (Diversity)	Acceptance Choice Engagement Fairness Power Rights	Develop mixed-use and diverse housing and functions	
		Create social & spatial adaptability by doing temporary development	
		Attract different population groups to the area	
		Create a fair distribution of resources	
		Develop an environment that creates tolerance and coherence	
		Leave space for small-scale initiatives during the development process	
		Develop regulations that promote fair housing and functions	
		Create and stimulate job opportunities for all and economic progress	
Movement	Choice Mobility Welfare	Develop walkable and bikeable areas	
		Create connections that serve a bigger area	
		Create cores and routing towards them	
		Invest in public transport connections and demotivate car-use	Papi et al. (2021)
		Develop continuous landscapes without barriers	
		Create safe movement	
		Create movement flows that stimulate interaction and meeting	Project for PS (n.d.)
(Climate) Adaptation	Resilience Welfare	Develop sustainably and climate adaptive	
		Develop nature-based	Papi et al. (2021)
		Develop efficient building and transport	
		Re-use buildings and building materials	Papi et al. (2021)
		Stimulate human behaviour that protects nature	
		Give a voice to nature in the decision-making process	
Development Process	Acceptance Choice Democracy Engagement Fairness Power Rights Welfare	Allow bottom-up development	
		Place users centrally in the decision-making	
		Protect those without a voice during the development process	
		Pay attention to temporary urbanism	
		Bring opportunities for citizens to protest and debate	
		Give public actors bigger powers than private actors	
		Allow everyone to benefit from public investments	
		Let private actors contribute to urban quality with fixed contracts	
		Create transparent and fair processes	

Table 11: Just City Framework
Planning and design principles coming from literature are highlighted

5.5 A Just City Framework
The product

The previous pages explained how the Just City Framework was developed. Besides, figure 86 shows the product. This model is the main result of this thesis research because it enables planners and designers to understand and make sense of the concept of a Just City. It is a tangible model that can be used by any stakeholder to guide the complexity of urban development.

Contribution to scientific knowledge
This chapter has shown how the analyses of earlier chapters of this report have led to planning and design principles translated into the Just City Framework. This demonstrates the strongly research-based nature of this framework and therefore, the framework contributes to scientific knowledge about planning for a Just City. It allows us to grasp the concept of a Just City and creates an understanding of it in a scientific manner. The framework is applicable to any urban (re)development and is therefore a useful model for every urban planner and designer.

Adjustability
The Just City Framework provides a general understanding of how to plan a Just City that can be applied in any urban (re)development project. Yet, it is also adjustable for context-specific urban demands. This is important because, as Griffin (2018) states in the introduction (page 26), it is important that citizens and other users of public space, can form a Just City for themselves. Therefore, this Just City Framework should not be seen as a defined end product, but more as a changeable and flexible model that can be made context-specific for each location. This makes the framework flexible for changing urban demands.

Multiple uses of the Framework
The following pages explain how the Just City Framework will be used in the following chapters of this study. Here it is important to describe that the framework can be used both as a starting point for new (spatial) designs and as an assessment model for existing situations. It can assess new developments as well as existing (neoliberal) developments. In fact, the framework is most applicable to already existing urban areas. Its use as an assessment model makes it a strong instrument for measuring whether or not existing situations meet the requirements of a Just City.

Visualizations of the Framework
The Just City Framework will recur frequently throughout this report in different forms. The circular shape will recur when the framework is treated as a conceptual model, while the listed visualization (see Table 12) will recur when the framework is used as an assessment model for a particular situation.

Figure 86: Just City Framework

Element of Urban Form	Just City Values	Planning or Design Principle	Assessment Scoring
Continuity & Legibility	Mobility Choice Acceptance Identity	Develop routing of accidentally meeting	
		Develop coherence in routing and orientation	
		Develop coherence in architecture and building style	
		Create landmarks for orientation	
		Create (functional) cores and routes leading there	
		Limit (infrastructural) barriers in the area	
Character	Acceptance Aspiration Choice Identity	Develop places of belonging	
		Develop places of inspiration & creativity	
		Develop places of spontaneity	
		Create coherence between citizens	
		Pay attention to 'soft' planning and temporary urbanism	
		Develop places of identity	
Enclosure	Acceptance Engagement Welfare	Develop safe places	
		Create coherence and work on community-building	
		Develop social safety	
		Create privacy for citizens & other users	
		Protect the human scale in the design	
		Find a right balance between public, semi-public & private space	
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses	
		Develop cores where different uses come together	
		Facilitate community-building and urban participation	
		Develop mixed-use and protect the development of diverse housing & functions	
		Develop places of spontaneous use and interaction	
		Develop unprogrammed places	
		Allow users to participate in the development of places	
		Create access to necessities for all	
		Do temporary development that allows space to adjust to changes in uses	
		Allow a diverse economy to grow and create a diversity of jobs	
Quality of the Public Realm	Identity Mobility Resilience Welfare	Develop qualitative and healthy places, mentally & physically	
		Develop places of character but with attention to own interpretation	
		Develop accessible and connecting places, with special attention to slow traffic	
		Develop sustainable and healthy places	
		Develop nature-based public places and create a right balance between building density and public space	
Mixture (Diversity)	Acceptance Choice Engagement Fairness Power Rights	Develop mixed-use and diverse housing and functions	
		Create access to good housing for everyone	
		Create social & spatial adaptability by doing temporary development	
		Attract different population groups to the area	
		Create a fair distribution of resources	
		Develop an environment that creates tolerance and coherence	
		Leave space for small-scale initiatives during the development process	
		Develop regulations that promote fair housing and functions	
		Create and stimulate job opportunities for all and economic progress	
Movement	Choice Mobility Welfare	Develop walkable and bikeable areas	
		Create connections that serve a bigger area	
		Create cores and routing towards them	
		Invest in public transport connections and demotivate car-use	
		Develop continuous landscapes without barriers	
		Create safe movement	
		Create movement flows that stimulate interaction and meeting	
(Climate) Adaptation	Resilience Welfare	Develop sustainably and climate adaptive	
		Develop nature-based	
		Develop efficient building and transport	
		Re-use buildings and building materials	
		Develop sustainable and comfortable buildings that create good living and working conditions	
		Give a voice to nature in the decision-making process	
Development Process	Acceptance Choice Democracy Engagement Fairness Power Rights Welfare	Allow bottom-up development	
		Place users centrally in the decision-making	
		Protect those without a voice during the development process	
		Pay attention to temporary urbanism	
		Bring opportunities for citizens to protest and debate	
		Give public actors bigger powers than private actors	
		Allow everyone to benefit from public investments & develop cost-efficiently	
		Let private actors contribute to urban quality (with fixed contracts)	
		Create transparent and fair processes	
		Scoring	

Table 12: Just City Framework
Listed visualisation, used for assessment

5.6 Using the Just City Framework

Now that an explanation of the Just City Framework has been provided, its application can be further explained. The following pages explain how the Just City Framework acts both as a starting point for an urban design, and an assessment model during the design process. A methodology that uses the framework as a tangible model for developing Just City environments is explained.

Chapters 6 and 7 apply the methodology and illustrate how it works.

5.7 Using the Just City Framework
A 5-Step Methodology

Now that the Just City Framework has been explained, a 5-Step Methodology that aims to translate the planning and design principles of the Framework into concrete design solutions, can be elaborated. This methodology forms an important output of this research since it allows planners, designers, and other stakeholders to actually create a strategy for a Just City and develop it. It contributes to the knowledge gap of how to strategically design for spatial justice.

The methodology consists of the following steps:

1. Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2. Develop typologies to design for that design theme

3. Assess the typologies with the Just City Framework as an assessment model

4. Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for the design theme

5. Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

These five steps form a good methodology to generate design typologies for the themes and choose from these typologies the ones that are most suitable for the creation of a Just City. It hereby contributes to research about the creation of a Just City in a theoretical way. By integrating the typologies as the final stage, an optimized design for a Just City can be established.

Figure 94 shows the process that takes place when the five steps are completed. It shows a filtering process where there are first a number of typologies that contribute to the values and principles of the Elements of Urban Form of the chosen design theme. Then, by reviewing against the Just City Framework, a list of typologies emerges with a score that provides information about the best typologies. This filtering process then forms the starting point for integration.

5-step Methodology

1. Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2. Develop typologies for that design theme

Design Typologies

3. Assess the typologies with the Just City Framework as an assessment model

Just City Framework

4. Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

Assessment model of suitable design solutions that contribute to the creation of a Just City

5. Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

Figure 87: 5-Step Methodology

5.8 Using the Just City Framework
5 design themes

The methodology that uses the Just City Framework as a starting point and assessment model begins with the establishment of a design theme that includes 1, 2 or 3 Elements of Urban Form. Any urban planner can develop such a theme for himself, depending on the context-specific circumstances of a location. For this thesis, however, a set of general design themes was chosen that together encompass all the Elements of Urban Form from the Just City Framework. The following explains how these themes were created and presents a description of the themes.

As said, every design theme is formed by establishing a relationship between 1, 2 or 3 Elements of Urban Form from the Just City Framework. For instance, the theme Mobility & Connectivity includes the values and principles of the Elements of Urban Form Continuity & Legibility and Movement. In total, there are 5 design themes and together they encompass all 9 Elements of Urban Form from the Just City Framework. These design themes are explained in the following.

1. Mobility & Connectivity
The first design theme includes 2 Elements of Urban Form, namely Continuity & Legibility and Movement. This design theme encompasses the planning and design principles of these two elements and aims to implement these principles in a design.

2. Functional Configuration
This second theme finds the overlap between the Elements Mixture (Diversity) and Activity & Use. It explores what a functional configuration might look like and how the principles of the two Elements of Urban Form can be translated into a design.

3. Public Space Development
The third design theme seeks to respond to the design and planning principles of Character, Quality of Public Realm and Activity & Use. It explores how public space should be designed and how the goals of the Elements of Urban Form can be translated into space.

4. Building Typologies
The fourth design theme focuses on the building typologies in urban development and how they should be designed in order to establish the values of a Just City. It combines the planning and design principles of Enclosure and (Climate) Adaptation. For (Climate) Adaptation, it focuses mainly on how existing buildings could remain and be transformed such that a climate-proof development could be achieved.

5. Development Process
The final design theme is one focused on process design. This theme includes only one of the Elements of Urban Form, which is Development Process. This theme explores the process behind urban development and how it could be designed.

Figure 88: Design theme Development Process

Figure 89: Design theme Mobility & Connectivity

Figure 90: Design theme Functional Configuration

Figure 91: Design theme Public Space Development

Figure 92: Design theme Building Forms

5.9 Using the Just City Framework
Optimization

The 5-Step Methodology is an optimization strategy. The five design themes (Mobility and Connectivity, Functional Configuration, Public Space Development, Building Typologies and Development Process) are first optimized by finding solutions that meet the needs of the Elements of Urban Form to which they are directly related. An optimization technique is then performed for the entire Just City Framework. Here the interventions are assessed and their influence on the other Elements of Urban Form is examined. Here, the most optimal solution for the framework as a whole is chosen, and thus a new optimization takes place.

Figure 95 visually depicts this process. First, the design includes only 1, 2 or 3 elements of urban form and then, by assessing the typologies, optimization takes place by looking at all the elements.

2   Develop options for a design theme by filtering the theme through the goals of the Elements of Urban Form

3   Assess the options by filtering them with the Just City Framework

Figure 93: Visualization of the optimization strategy of the 5-Step Methodology

5.10 Using the Just City Framework
Assessment

As explained in the previous pages, design typologies will be assessed, using the Just City Framework as an assessment model. This assessment requires a strategy. The table to the right shows the criteria against which each urban design element will be assessed. For example, the Continuity & Legibility element will be assessed against the criterion of scale, while Character will be measured against the direct efficiency criterion. The table also shows that all Elements of Urban Form are assessed using a point scale. This scoring runs from -2 to 2, and the fourth column shows exactly what each score means. This provides more guidance on how interventions will be assessed in the design phase and how they can be better compared with each other. In the design phase, each principle of the third circle of the Just City Framework is assessed against these criteria. All principles are given a number from -2 to 2, as shown in the figure below.

-2	-1	0	1	2

As mentioned above, the interventions in the design phase are tested against all the planning and design principles in the Just City Framework. Finally, all scores are added together to arrive at a final score. These final scores allow us to compare certain interventions and decide which intervention best contributes to the creation of a Just City. Although an absolute score is deduced, it is important to point out that this is still a subjective and personal interpretation. Therefore, in practice, the final score serves more as an opening for discussion to compare certain solutions than as an established fact.

Principle	Score
Principle 1	-1
Principle 2	2
Principle 3	2
Principle 4	1
Total	4

Table 14: Example of scoring strategy

Note: An important note is that the assessment in Chapters 6 and 7 of this report is done by the author. Even though there is a scoring table, there is some degree of interpretation in this assessment. This is an important limitation to mention. In an existing development, it would be advisable to have different stakeholders conduct the assessment and compare them. In doing so, the differences in scoring could act as input to further discussion.

Element of Urban Form	Just City Values	Assessment criterion	Assessment meaning
Continuity & Legibility	Mobility Choice Acceptance	*Scale* The extent to which the intervention contributes to Continuity & Legibility on both a small and a big scale	**-2** Intervention has a negative effect on continuity & legibility on both a small and a big scale **-1** Intervention has a negative effect on continuity & legibility on a small scale or big scale **0** Intervention has no effect on continuity & legibility **1** Intervention has a positive effect on continuity & legibility on a small scale or big scale **2** Intervention has a positive effect on continuity & legibility on both a small and a big scale
Character	Acceptance Aspiration Choice Identity	*(Direct) Efficiency* The extent to which the intervention contributes directly or indirectly to the creation of places with character	**-2** Intervention has a direct negative effect on the creation of places with character **-1** Intervention has an indirect negative effect on the creation of places with character **0** Intervention has no effect on the creation of places with character **1** Intervention has an indirect positive effect on the creation of places with character **2** Intervention has a direct positive effect on the creation of places with character
Enclosure	Acceptance Engagement Welfare	*(Direct) Efficiency* The extent to which the intervention contributes directly or indirectly to the creation of enclosed places.	**-2** Intervention has a direct negative effect on the creation of enclosed places **-1** Intervention has an indirect negative effect on the creation of enclosed places **0** Intervention has no effect on the creation of enclosed places **1** Intervention has an indirect positive effect on the creation of enclosed places **2** Intervention has a direct positive effect on the creation of enclosed places
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	*Scope* The extent to which the intervention contributes to activating users and creating a wide scope of uses	**-2** Intervention contributes strongly to creating inactive places with single uses **-1** Intervention contributes to creating inactive places with single uses **0** Intervention has no effect on the creation of activity & use **1** Intervention contributes to creating active places with multiple uses **2** Intervention contributes to creating vibrant and active places with a wide scope of uses
Quality of the Public Realm	Identity Mobility Resilience Welfare	*Impact* The extent to which the intervention has a big or small impact on the creation of quality in the public realm	**-2** Intervention has a strong negative impact on creating qualitative places **-1** Intervention has a negative impact on creating qualitative places **0** Intervention has no effect on the creation of qualitative places **1** Intervention has a positive impact on creating qualitative places **2** Intervention has a strong positive impact on creating qualitative places
Mixture (Diversity)	Acceptance Choice Engagement Fairness Power Rights	*Scope* The extent to which the intervention contributes to a wide scope of Mixture (Diversity)	**-2** Intervention contributes strongly to creating monofunctional places with single uses **-1** Intervention contributes to creating monofunctional places with single uses **0** Intervention has no effect on the creation of mixture (diversity) **1** Intervention contributes to creating multifunctional places with multiple uses **2** Intervention contributes to creating strong multifunctional places with a wide scope of uses
Movement	Choice Mobility Welfare	*Scale* The extent to which the intervention contributes to the goals of Movement on both a small and a big scale	**-2** Intervention has a negative effect on movement on both a small and a big scale **-1** Intervention has a negative effect on movement on a small scale or big scale **0** Intervention has no effect on movement **1** Intervention has a positive effect on movement on a small scale or big scale **2** Intervention has a positive effect on movement on both a small and a big scale
(Climate) Adaptation	Resilience Welfare	*Impact* The extent to which the intervention has a big or small impact on the creation of (Climate) Adaptation	**-2** Intervention has a strong negative impact on creating (climate) adaptive places **-1** Intervention has a negative impact on creating (climate) adaptive places **0** Intervention has no effect on the creation of (climate) adaptive places **1** Intervention has a positive impact on creating (climate) adaptive places **2** Intervention has a strong positive impact on creating (climate) adaptive places
Development Process	Acceptance Choice Democracy Engagement Fairness Power Rights Welfare	*Alignment* The extent to which the intervention is well aligned with the public needs and the actors are aligned with each other	**-2** Intervention is strongly unaligned with public needs or neglects the inventory of it **-1** Intervention is unaligned with public needs or neglects the inventory of it **0** Intervention has no effect on the alignment with public needs **1** Intervention is strongly aligned with public needs or contributes to the inventory of it **2** Intervention is strongly aligned with public needs or contributes to the inventory of it

Table 13: Assessment strategy belonging to the 5-Step Methodology

5.11 Explanation of the vocabulary

There are several terms used in the methodology that recur frequently. Examples of these terms are "Just City Values," "Elements of Urban Form," "Planning and Design Principles," "Leading Strategy," "Design Themes," "Typologies," and "Assessment Model." The following is an explanation of these terms, where they appear in the methodology and how they are used. This overview can be consulted in case one becomes disoriented through the report.

Vocabulary belonging to the Just City Framework
Elements of Urban Form
The term "Elements of Urban Form" is in the inner circle of the Just City Framework. It consists of 9 spatially oriented elements that form the starting point of the framework, namely Continuity & Legibility, Character, Enclosure, Activity & Use, Quality of Public Realm, Mixture (Diversity), Movement, (Climate) Adaptation and Development Process. A free translation of the word "Element" is aspect or section and "Urban Form" represents the organization of urbanity and public space. The term here stands for the various aspects that together shape urbanity and public space.

Throughout the report, the term "Elements of Urban Form" is also used in reference to the 1/9 part of the Just City Framework that relates to the element.

Just City Values
The term "Just City Values" also returns in the Just City Framework. Reflecting to the second circle in the framework, this term represents a set of core values that must be protected in urban development in order to create a Just City. The term, as well as the values themselves, were created by Griffin (2018).

Planning & Design Principles
The "Planning & Design Principles" return in the third circle of the Just City Framework. They result from extensive analyses in chapters 3 and 4, and can be considered fundamental rules that point the way to the creation of a Just City. These rules say something about the requirements, needs and demands for the contemporary Just City. They appear not only throughout the Just City Framework, but also in the assessments.

Leading Strategy
The " Leading Strategy" refers to the fourth circle of the Just City Framework. It provides a general strategy that can be followed for the specific Element of Urban Form to which it relates. For instance, the guiding strategy for the "Movement" element is "Large and small-scale connections with a focus on slow traffic." The guiding strategy does not appear often in this report. It is only included in the Just City Framework as a summary of the planning and design principles of the third circle.

Vocabulary belonging to the 5-Step Methodology
Design Theme
The term " Design Theme" refers to the first step of the 5-step method. In this step, one or more Elements of Urban Form are combined into an overlapping theme. This theme is then called a design theme. Throughout the report, there are frequent references to the 5 different design themes, which are explained on page 104.

Typologies
"Typologies" refers to the second step of the 5-step method. During this step, several options are developed for design within a given design theme. For instance, several street typologies can be developed for the Mobility & Connectivity theme. The following chapters of this thesis often use this term and develop a range of typologies. In other steps of the 5-step method, the typologies are assessed and scored.

Assessment Model
Finally, the word " Assessment Model" also appears frequently in the report. This model is consistent with the assessment of the typologies in the third step of the 5-step method. It provides an overview of the scores of the different typologies and thus provides insight into the influence of each typology on the creation of a Just City environment.

Conclusion
As mentioned, the overview of terms given above can be used at any time during the reading of the report. It provides an overview of the most commonly used vocabulary.

Figure 94: Abstract illustration of the Just City Framework with the used vocabulary

1. Pick a **design theme** that includes the development of 1, 2, or 3 Elements of Urban Form

2. Develop **typologies** for that design theme

3. Assess the typologies with the Just City Framework as an assessment model

4. Develop an **assessment model** that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

5. Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

Figure 95: 5-Step Methodology with vocabulary highlighted

5.12 Relation 5-Step Methodology with practice

Relation 5-Step Methodology with political discourse

The five-step methodology allows complex urban development to be steered in a direction where the Just City of Amsterdam can be revived. This is in line with how the political discourse in the metropolis is changing, as there is a growing concern for inclusivity and equality in the city and the planning paradigm is changing. This can be seen in multiple ways. For instance, it can be seen in policy documents over time. Whereas in the vision for Zuidas in 2009 (Gemeente Amsterdam, 2009) the focus was still mainly on growing the knowledge economy and strengthening the economy, in the 2016 vision (Gemeente Amsterdam, 2016) there is additional focus on inclusivity, livability and strengthening the community. These documents show that the planning paradigm is again shifting in the direction in which the Just City is gaining importance. The 5-Step Methodology provides the models and instruments to respond to this changing paradigm and create a new strategy.

The importance of inclusiveness and equality can also be seen in voting behavior in the city of Amsterdam. In the 2018 municipal elections, Groenlinks emerged as the biggest winner and in 2022 it was the PvdA (Allecijfers.nl, n.d.). These are both parties that have inclusiveness and equal opportunities as great values. This shows that Amsterdammers also long for more attention to these issues and a revival of the Just City. The proposed methodology contributes to this and responds to this political debate.

Although the Just City Framework responds to contemporary political discourse in Amsterdam, it can also respond to possible new changes. Indeed, the Just City Framework is not only adaptable to context-specific needs, even if other (political) needs change, the Just City Framework can be adapted. This allows it to respond to changes in society and the political environment.

Relation 5-Step Methodology with other disciplines

The Just City Framework forms the basis of the 5-Step Methodology. Currently, the framework is based primarily on the analyses in chapters 3 and 4 of this thesis. Although these chapters aimed to include different viewpoints and examine a wide range of issues in the city of Amsterdam, the analyses were conducted from the perspective of one discipline, namely the discipline of urban planning and design. Therefore, a limitation of the current status of the Just City Framework is that knowledge of other professions is missing, and a recommendation for future research would be to include more viewpoints from different professions to make the Just City Framework more complete.

Although the current version of the Just City Framework lacks perspectives from other professions, this does not mean that the five-step method does not allow for the inclusion of these disciplines in the future. As mentioned, the Just City Framework is a flexible and adaptable model in which new perspectives can be included at any time. Similarly, the 5-Step Methodology treats the Just City Framework as a changeable and evaluative model that is never finished. Therefore, new perspectives can still be developed and incorporated while the Just City Framework may already be in use. In fact, constant evaluation of the Just City Framework is needed to incorporate changing demands and knowledge from different disciplines.

The advice for further research would be to continue to research and incorporate different perspectives from different disciplines into the Just City Framework. This allows the framework to become more complete and thus more just over time.

Applying the methodology in practice

In Appendix A.3, an experiment was conducted by applying the 5-Step Methodology in practice. This involved investigating the preliminary steps to be taken before applying the 5-Step Methodology. Figure 96 shows these preliminary steps. These stages mainly focus on adjusting the Just City Framework to the context-specific conditions of the project location and preparing the model for efficient use for the specific site. Therefore, the steps focus on extensive analyses of the project site, the development process and the demands of the various stakeholders. In the second preliminary step, it is important to include the context-specific needs as planning and design principles in the Just City Framework. This makes the framework well prepared to be used in the 5-Step Methodology.

The experiment in Appendix A.3 emphasizes the importance of making the Just City Framework context-specific. Here, the most important step is to include the demands of users of the site and listen to their needs.

Project locations

The strength of the Just City Framework as an assessment model makes it a useful instrument for measuring existing situations. Therefore, the 5-Step Methodology is very applicable to already existing urban developments. Practical application of the methodology will be most efficient for existing project sites, as the current situation can be compared well with possible future scenarios.

To what extent can a Just City be achieved?

Although the Just City Framework contributes to scientific knowledge about how spatial justice can be planned, it is also important to be aware of the limitations of this goal. Pellissier-Tanon & Moreira (2007) emphasize that justice is an impossible goal that can never be fully achieved. Injustice is a circumstance that always exists to some degree. Even though it is always something to strive for and be fully aware of, all needs are never fully met.

This thesis is aware of this limitation. It is important to emphasize that although the products of this chapter aim to integrate all the requirements for a Just City, the products will never succeed in fully developing a Just City. The design solutions resulting from the application of the 5-Step Methodology will always be a compromise between demands. A Just City will never be fully achieved. Nevertheless, the methodology strives to come as close as possible.

Preperatory steps

0.1 Do analyses

Research the strength and weaknesses of the location and inventorize the needs and wishes of important stakeholders

0.2 Adjust the Just City Framework

Translate conclusions from context-specific analyses into planning & design principles and include them in the framework

Figure 96: Preparatory steps to be taken before applying 5-Step Methodology in practice

5.13 Conclusion

This chapter provided an answer to the following research question:

What frameworks and models are included in a methodology that allows one to grasp the concept of a Just City and plan and design for it?

The chapter answers this question by introducing a Just City Framework and a 5-Step Methodology that can be applied to any urban (re)development. Together, these tools form a methodology that makes it possible to grasp the concept of a Just City and make favorable decisions for it. It provides tangible models and instruments with which urban planners but also all other stakeholders can understand how a Just City can be planned.

The Just City Framework
Although the Just City Framework is still adaptable to any context-specific development and thus can be shaped by local citizens themselves, it provides a general understanding of how a Just City can be designed. In the 5-Step Methodology, it is used as a starting point for spatial design and as an assessment model against which certain decisions can be evaluated. In this respect, it functions as a model that can be used from the preliminary stage of development until actual realization. It is most suitable for existing urban areas.

Scientific underpinning of the framework
The chapter has shown that the construction of the framework is based on conclusions from scientific research. Chapters 3 and 4 led to conclusions on how to plan an Just City, and the current chapter has translated these conclusions into concrete principles. This highlights the scientific strength of the methodology and the research-based foundation.

5-Step Methodology
With the Just City Framework as a guiding model through the process, a methodology is formed that uses the framework and translates its knowledge into a tangible and concrete design. The methodology consists of five steps and, if followed properly, leads to a scientifically based spatial design. The methodology uses a design themes and explores typologies for it, based on the objectives for the Elements of Urban Form associated. Subsequently, the typologies are tested against the Just City Framework, and the influence of the typologies on the other Elements of Urban Form is examined. From here, an overview of typologies with a scoring system emerges, providing concrete information on why to choose or not to choose certain interventions. Finally, a design can be created by integrating the solutions with the highest score into a spatial configuration.

Assessing a Just City
As mentioned above, assessment is an important part of the proposed planning methodology. Therefore, an assessment strategy is prepared that establishes criteria and thus provides a guide to conduct the assessment as objectively as possible. This strategy allows for a reliable assessment. Nevertheless, it should be noted that in this thesis, this assessment is performed only by the author and there is still a degree of personal interpretation. Therefore, if the methodology is used in actual urban development, it is recommended that the assessment be conducted by multiple stakeholders to develop an inclusive score of the design typologies. Moreover, the final scores should not be regarded as fixed, but as a starting point for further discussion.

Relation methodology with practice
The chapter ended by relating the proposed methodology to practice. The strategy aligns well with the political discourse, as voting patterns indicate a growing demand for inclusive and democratic decision-making. Furthermore, the chapter explained that although the current version of the Just City Framework does not include the perspectives of all disciplines, the methodology allows the framework to evolve in the future. In fact, before putting the 5-Step Methodology into practice, it is always necessary to re-evaluate the framework and include context-specific demands. By doing so, efforts can be made to get as close as possible to the ideal of a Just City, even though this is never entirely possible.

Next steps
The following chapters will explain the methodology by applying it. The five design themes explained on page 106 will be explored and typologies are developed for them. For each theme, 3 types of typologies will be produced and assessed, using the Just City Framework as an assessment model. The development of basic typologies will result in Design Typologies Assessment Models. Appendix A.3 will explain how these basic design typologies can, with small adjustments, be used in practice. For the Design theme Development Process, step 5 will also be conducted and the typologies will be translated into an overall process design.

6. Designing a Just City

The next chapter focuses on the four spatial design themes explained on page 104. For the four themes, this chapter develops typologies and assesses their contribution to a Just City. This results in an overview of design typologies and an assessment of their contribution. This overview provides urban planners and designers with a tangible Assessment Model from which to design. At the end of the chapter are impressions that show how a combination of the typologies might land in urban space. Appendix A.3 describes how the Design Typologies Assessment Models can be used in practice and how the design typologies should be adapted to make them applicable in the field.

The research question that will be answered in this chapter is:

How can a new methodology result in concrete planning and design strategies that allow the Just City to revive?

The chapter focuses mainly on a design strategy and shows how the 5-Step Methodology can be applied. Furthermore, a comparison is made between the theoretical approach in this chapter and how the methodology behaves in practice.

Photo 22: "Bouw van de noodbrug naast de Hogesluis (Brug 246) over de Amstel" (Stadsarchief Amsterdam/ Rijn, T. van, 2009)

6.1 Introduction

The next chapter focuses on the 4 spatially oriented design themes explained on page 105. In summary, these design themes all encompass 2 or 3 Elements of Urban Form from the framework, as listed below:

1. **Design theme:** Mobility & Connectivity
   - **Elements of Urban Form**: Continuity & Legibility, Movement

2. **Design theme:** Functional Configuration
   - **Elements of Urban Form:** Activity & Use, Mixture (Diversity)

3. **Design theme:** Public Space Development
   - **Elements of Urban Form:** Character, Activity & Use, Quality of the Public Realm

4. **Design theme:** Building Forms
   - **Elements of Urban Form:** Enclosure, (Climate) Adaptation, Development Process

Setup of this chapter
This chapter applies the first 4 steps of the 5-Step Methodology for each design theme. This results in a Design Typologies Assessment Model for each theme in which a scoring summary of the various typologies is provided. This will act as one of the final results of this thesis. It provides useful typologies that can be applied in different urban (re)developments. Pages 186 and 187 explain the conclusions of the experiment in Appendix A.3, which elaborates on how the basic typologies from the Design Typologies Assessment Model can be used in practice. This highlights the usefulness of these basic typologies and their assessments in practice.

Note: For each theme, 3 topics of typologies are worked out. Of course, there are many more typologies that can be worked out for that theme. Any urban planner or designer could apply the methodology to all kinds of typologies. This chapter discusses some basic typologies.

The chapter ends with two general impressions of how the design solutions could be integrated into a spatial design. This gives an impression of how step 5 of the methodology could be developed. In actual urban development, this step would be carried out more extensively and together with stakeholders to create a qualitative end result.

At the end of the chapter, a conclusion and answer to the research question will be provided.

Readability
The chapter follows the five steps of the Methodology of the page opposite. To understand which step illustrates a particular page in this chapter, the step is shown in the right-hand corner of the page. This enables a good understanding of how to apply the methodology.

Contemporary European city as reference
This chapter develops basic typologies for spatial interventions in public spaces. The aim is to create general typologies that are, with limited adjustments, applicable to any location. However, it should be noted that the typologies take the European dense urban structure as a starting point and that the typologies may need to be adapted more if applied to rural and dispersed urban developments.

5-step Methodology

1. Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2. Develop typologies for that design theme

Design Typologies

3. Assess the typologies with the Just City Framework as an assessment model

Just City Framework

4. Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

Assessment model of suitable design solutions that contribute to the creation of a Just City

5. Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

Figure 97: 5-Step Methodology

6.2 Mobility & Connectivity
Development of typologies

The first design theme of this chapter is Mobility & Connectivity. This theme includes the design of two Elements of Urban Form from the Just City Framework, namely Continuity & Legibility and Movement. Typologies assessed for this theme are typologies related to infrastructural structures, street typologies and typologies for reducing infrastructural barriers.

Figure 98: Design Theme Mobility & Connectivity

Element of Urban Form (Circle 1)	Just City Values (Circle 2)	Planning & Design Principles (Circle 3)		Leading Strategy (Circle 4)
Continuity & Legibility	Mobility Choice Acceptance	Develop routing of accidentally meeting		Continuous landscapes leading to functional cores
		Develop coherence in routing and orientation		
		Develop coherence in architecture and building style		
		Create landmarks for orientation		
		Create (functional) cores and routes leading there		
		Limit (infrastructural) barriers in the area		
Movement	Choice Mobility Welfare	Develop walkable and bikeable areas		Big & small scale connections with a focus on slow traffic
		Create connections that serve a bigger area		
		Create cores and routing towards them		
		Invest in public transport connections and demotivate car-use		
		Develop continuous landscapes without barriers		
		Create safe movement		
		Create movement flows that stimulate interaction and meeting		

Table 15: Elements of Urban Form included in the design theme Mobility & Connectivity

6.2 Mobility & Connectivity
Development of typologies

Infrastructural network
There are different typologies for creating an infrastructural structure in urban development. For instance, one can choose little hierarchy and create equally busy streets throughout the area. One can also opt for a hierarchy where the busy streets run through the area or where the busy streets surround the area. All typologies have a different impact on creating a Just City environment and below the different typologies are explained and their impact is assessed.

Figure 99: Typologies for infrastructural stucture (Based on BAW, 2016)

Typology 1: Little Hierarchy
The first typology is that of the small hierarchy. In this typology, there is little to no differentiation in the importance of streets and all streets are equal. This has positive and negative effects on creating a Just City environment. For instance, the traffic is distributed evenly throughout the streets so there are no extremely congested streets or major infrastructural barriers. This contributes to good flow and continuity & legibility in the area. On the other hand, the section in figure 101 also illustrates that all streets are the same and thus have no individual identity. There is no reason to visit other streets because they are all the same and. Finally, if there is little identity in the streets, there is also little sense of belonging. These aspects show that this form also negatively affects the development of a Just City.

Figure 100: Illustration of typology 1: no hierarchy (Based on BAW, 2016)

Figure 101: Section of typology 1: no hierarchy

Photo 23: 321 W 47th St, New York (Google Maps, 2021)

Typology 2: Main roads around the area

A second typology is a form where there is a hierarchy of roads and the main infrastructural roads are located around an urban area. This form helps to create a Just City and disadvantages it at the same time. Thus, the typology creates a car-free urban area in which slow traffic has priority. Good quality can be created in these areas that contribute to community-building and climate adaptation. On the other hand, since the built environment will be focused on these high-quality public spaces, the main roads surrounding the area may become neglected and therefore unsafe at night. In the illustration to the right, such a street is shown and it can be seen that it lacks connection to the surrounding areas and is a major infrastructural barrier. Consequently, this typology contributes to the creation of a Just City, but also disadvantages it.

Figure 102: Illustration of typology 2: main roads around the area (Based on BAW, 2016)

Figure 103: Section of typology 2: main roads around the area

Photo 24: N200 (Google Maps, 2021)

Typology 3: Main roads through the area

In the third typology, main roads run through the core of an area. Cars and public transport move along these roads, while the other roads are more focused on slow traffic. In this typology, the busy roads become part of the urban configuration and the Coolsingel in Rotterdam is a good example of this. This typology also contributes to the creation of a Just City environment by creating places of belonging and attention to slow traffic. Because the main roads are part of the city structure, these roads are also less neglected. Nevertheless, these roads should not be too busy, otherwise they become unsafe and form strong infrastructural barriers that disadvantage a Just City.

Figure 104: Illustration of typology 3: main roads through the area (Based on BAW, 2016)

Figure 105: Section of typology 3: main roads through the area

Photo 25: 'Zicht op een deel van de Coolsingel in het centrum van Rotterdam' (Wikipedia/Wikifrits, 2008)

Conclusion

Table 16 provides an assessment of the three typologies explained. It shows how they do or do not contribute to the creation of a Just City and gives a score for their contribution.

It can be seen that the hierarchical approach, in which the main roads run through the area, scores the highest and thus contributes the most to the creation of a Just City. Yet, it also appears that this typology scores negatively on the objective of reducing infrastructural barriers and creating safe traffic. It is therefore important to pay extra attention to safety and embedding the main roads in the urban landscape when actually developing this typology.

Element of Urban Form	Design Principle	Typology 1 No Hierarchy	Typology 2 Busy roads around the area	Typology 3 Busy roads move through the area
Continuity & Legibility	Develop routing of accidentally meeting	-1	0	0
	Develop coherence in routing and orientation	2	1	1
	Create (functional) cores and routes leading there	0	1	2
	Limit (infrastructural) barriers in the area	2	-2	-2
Character	Develop places of belonging	-1	1	1
	Develop places of inspiration & creativity	-1	1	1
	Develop places of spontaneity	-1	1	1
	Create coherence between citizens	-1	1	1
	Develop places of identity	-1	1	1
Enclosure	Develop safe places	2	-2	-1
	Create coherence and work on community-building	-1	1	1
	Develop social safety	-1	-1	1
	Protect the human scale in the design	-1	1	1
Activity & Use	Develop places that serve and stimulate different uses	-1	1	1
	Develop cores where different uses come together	-1	1	2
	Facilitate community-building and urban participation	-1	1	1
	Develop places of spontaneous use and interaction	-1	1	1
	Create access to necessities for all	-1	1	1
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	0	1	1
	Develop places of character but with attention to own interpretation	-1	1	1
	Develop accessible and connecting places, with special attention to slow traffic and public transport	-1	2	2
	Develop sustainable and healthy places	-1	1	1
	Develop nature-based public places and create a right balance between building density and public space	-1	1	1
Mixture (Diversity	Develop an environment that creates tolerance and coherence	-1	1	1
Movement	Develop walkable and bikeable areas	0	2	2
	Create connections that serve a bigger area	-1	1	1
	Create cores and routing towards them	-1	1	2
	Invest in public transport connections and demotivate car-use	-2	2	1
	Develop continuous landscapes without barriers	2	-1	-1
	Create safe movement	1	1	-1
	Create movement flows that stimulate interaction and meeting	-1	1	1
(Climate) Adaptation	Develop sustainably and climate adaptive	-1	1	1
	Develop efficient building and transport	1	0	0
	Stimulate human behaviour that protects nature	-1	1	1
	Give a voice to nature in the decision-making process	-1	1	1
Development Process	Place users centrally in the decision-making	-1	1	1
	Scoring	-16	27	31

Table 16: Assessment infrastructural structure, using the Just City Framework

Street typologies

There are several typologies for how streets can be designed (Global Designing Cities Initiative, & National Association of City Transportation Officials, 2016). These typologies can be categorized by main users. For example, one typology is the shared street where there is no separation between users. In addition to this typology, there is the pedestrian street, the bicycle-oriented street, the car-oriented and the public transport-oriented street. The illustration to the right shows these typologies, and in the following they are assessed, using the Just City Framework as an assessment model.

Figure 106: Street typologies
(Based on Global Designing Cities Initiative, & National Association of City Transportation Officials, 2016)

Typology 1: Shared streets

The first street typology is the shared street. In this street, there is no difference in materialization and therefore no separation between users. Cars, pedestrians and cyclists use the street equally.

This typology contributes to the creation of a Just City environment. For example, it creates a strong relationship between users and citizens, and residential neighborhoods become extensions of front yards, creating places of belonging. The public space also becomes a lively place and the typology demotivates car use. Yet in this typology, safety must be protected. Because all users use the same space, accidents happen faster and proper rules must be implemented.

Figure 107: Shared street
(Based on Global Designing Cities Initiative, & National Association of City Transportation Officials, 2016)

Typology 2: Pedestrian streets

No other vehicles are allowed in a pedestrian street. This typology is common in residential neighborhoods or shopping areas.

To some extent, this typology also contributes to the creation of a Just City. This typology also makes the street an extension of front yards and private spaces, creating places of belonging. It also creates safe places and allows identity and creativity to develop.

Figure 108: Pedestrian street
(Based on Global Designing Cities Initiative, & National Association of City Transportation Officials, 2016)

Typology 3: Bike-oriented streets

The third typology is the bicycle-oriented street. In this typology, cyclists have the right of way. Often there is also space for pedestrians, but their lanes are separated.

This third typology also contributes to the creation of a Just City. It creates long-distance connections and therefore contributes to the creation of functional cores and routing to them. But there are also threats that the typology disadvantages a Just City in some ways. For example, these roads must remain lively and not become unsafe at night.

Figure 109: Bike-oriented street
(Based on Global Designing Cities Initiative, & National Association of City Transportation Officials, 2016)

Typology 4: Car-oriented streets

The fourth street typology is the car-oriented street. This street focuses on mobility for cars. Cyclists and pedestrians are also welcome, but on separated lanes.

The car-oriented street often does not contribute to the creation of a Just City. It creates infrastructural barriers and limits community-building. Yet, these streets can be useful in reducing pressure on other streets. Therefore, they can and often should be used to create efficient transportation and safe travel.

Figure 110: Car-oriented street
(Based on Global Designing Cities Initiative, & National Association of City Transportation Officials, 2016)

Typology 5: Public transport-oriented streets

The final typology is the public transport-oriented street. As the title suggests, this street is oriented toward public transportation and therefore contributes in many ways to the creation of a Just City environment. It discourages car use and public transportation also attracts lively and active places. Also, the public transportation oriented street helps to reduce pressure on other streets and therefore efficient transportation.

Figure 111: Public transport-oriented street
(Based on Global Designing Cities Initiative, & National Association of City Transportation Officials, 2016)

Conclusion

The typologies explained come together in the assessment table below. This shows a score on how they contribute to creating a Just City.

The score shows that shared street and pedestrian street contribute the most to creating a Just City environment. Yet, it can also be seen that these typologies have a negative impact on creating efficient transportation. Therefore, attention should also be paid to creating car-oriented and public-transportation-oriented streets. The public transport-oriented street contributes best to the creation of a Just City. Therefore, in planning, it is important to pay attention to demotivating car use and promoting public transportation in all different ways. In this way, as many shared streets and pedestrian streets as possible can be created, while also establishing efficient transportation.

Element of Urban Form	Design Principle	Typology 1 Shared Street	Typology 2 Pedestrian Street	Typology 3 Bike-oriented street	Typology 4 Car-oriented Street	Typology 5 Public transport oriented streets
Continuity & Legibility	Develop routing of accidentally meeting	1	1	0	0	0
	Create (functional) cores and routes leading there	1	1	2	1	2
	Limit (infrastructural) barriers in the area	2	2	1	-2	-1
Character	Develop places of belonging	2	2	1	0	1
	Develop places of inspiration & creativity	2	2	1	0	1
	Develop places of spontaneity	2	2	1	0	1
	Create coherence between citizens	2	2	0	0	1
	Develop places of identity	2	2	1	0	1
Enclosure	Develop safe places	0	2	1	0	1
	Create coherence and work on community-building	2	2	1	0	1
	Develop social safety	1	1	1	0	1
	Protect the human scale in the design	2	2	1	-1	0
Activity & Use	Develop places that serve and stimulate different uses	2	2	1	-1	1
	Develop cores where different uses come together	1	1	2	1	2
	Facilitate community-building and urban participation	2	2	0	0	1
	Develop places of spontaneous use and interaction	2	2	1	0	1
	Develop unprogrammed places	1	1	0	0	1
	Allow users to participate in the development of places	2	1	0	0	1
	Create access to necessities for all	1	1	2	1	2
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	1	1	1	-1	1
	Develop places of character but with attention to own interpretation	2	1	0	0	1
	Develop accessible and connecting places, with special attention to slow traffic and public transport	1	2	2	1	2
	Develop an environment that creates tolerance and coherence	1	1	0	0	1
Movement	Develop walkable and bikeable areas	1	2	2	-1	2
	Create connections that serve a bigger area	0	0	1	2	2
	Create cores and routing towards them	1	1	2	1	2
	Invest in public transport connections and demotivate car-use	1	1	1	-2	2
	Develop continuous landscapes without barriers	2	2	1	-2	-1
	Create safe movement	0	2	1	1	1
	Create movement flows that stimulate interaction and meeting	2	2	1	0	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1	1	2	-2	2
	Develop efficient building and transport	-2	-2	2	2	2
	Stimulate human behaviour that protects nature	1	1	1	-2	2
	Give a voice to nature in the decision-making process	1	1	1	-2	2
	Scoring	43	48	35	-6	40

Table 17: Assessment street typologies, using the Just City Framework

Limiting infrastructural barriers

As the analyses and the Just City Framework show, large infrastructural barriers create inequality in a city and limit the goals for Continuity & Legibility and Movement. Therefore, the Mobility & Connectivity theme explores how these infrastructural barriers can be reduced and what typologies exist. In addition, these typologies are illustrated. Below, the different typologies are explained and elaborated in a paragraph.

Figure 112: Typologies for limiting infrastructural barriers

Typology 2: Accepting

The second typology for reducing infrastructural barriers is the strategy of acceptance. In this strategy, the existence of infrastructural barriers is accepted and urban development responds to this existing situation. The only way to reduce barriers is to build bridges over them or tunnels under them or to cover them over small distances.

This typology does contribute to the creation of a Just City development because it is not too expensive and therefore cost-effective. It creates less dependence on private actors and allows for more bottom-up development. Yet it does not give much more quality to a place. The new connections created are limited and it doesn't do much to mitigate health problems.

Figure 115: Strategy "accepting"

Figure 116: Section belonging to strategy "accepting"

Typology 1: Hiding

In the first typology for reducing infrastructural barriers, a strategy of hiding is chosen. An example is tunneling, where infrastructure is hidden underground. This offers great advantages for creating a Just City environment. For instance, it contributes to physical and mental health by reducing noise and air pollution. It also makes space available, allowing for more development and therefore more available housing for everyone. This space can also be used for more green and climate-adaptive development.

A disadvantage of this choice is the high cost. There is high public investment associated with hiding infrastructure and this compromises the Just City principle of efficient use of public investment. Also, the power of private actors grows and there is less access to small-scale initiatives in the development process.

Figure 113: Strategy "Hiding"

Figure 114: Section belonging to strategy "hiding"

Typology 3: Embedding

The third strategy is that of embedding. In this strategy, the infrastructure barrier is embedded in the landscape and used as a placemaker. An example is creating cafes and stores under the infrastructure where people gather.

This typology also contributes to and simultaneously disadvantages a Just City environment. It contributes to values such as placemaking and community-building and it is cost-effective. Also, using the infrastructural barrier as a placemaker contributes to enabling bottom-up initiatives and temporary development. On the other hand, infrastructure still separates city districts and its impact on physical and mental health is negative.

Figure 117: Strategy "embedding"

Figure 118: Section belonging to strategy "embedding"

Typology 4: Rerouting and combining

The fourth typology consists of rerouting and combining infrastructural barriers. This is a typology for many places in Amsterdam, since train tracks and highways both run through the city, but are not always combined. Combining them creates a larger infrastructural barrier, but also frees up space and protects continuity in other parts. So it partly contributes to creating a Just City environment, but it is important to think about how to deal with the other infrastructural barriers that have become larger. It is also an expensive intervention, requiring private investment, increasing the power of private actors and making bottom-up initiatives less accessible.

Figure 119: Strategy "rerouting"

Figure 120: Section belonging to strategy "rerouting"

Conclusion

Looking at the goals for Continuity & Legibility and Movement, there are several solutions that are appropriate for reducing infrastructural barriers. Table 18 shows how each typology does or does not contribute to creating a Just City environment.

It can be seen that the "hiding" typology contributes to many of the goals except for the development process. This is because of the high (public) costs involved and the reliance on private actors that come with it. Therefore, if this solution is created, it is important to keep in mind that firm contracting and strict rules are necessary.

If a typology that pays particular attention to the development process is chosen, the table shows that typology 3, "embedding," is the most appropriate. In this typology there are fewer costs and thus less dependence on private actors and more room for small-scale initiatives. Nevertheless, a negative impact on (climate) adaptation must be taken into account in this typology and there are still infrastructural barriers.

Element of Urban Form	Design Principle	Typology 1 (Hiding)	Typology 2 (Accessing)	Typology 3 (Embedding)	Typology 4 (Rerouting & combining)
Continuity & Legibility	Develop routing of accidentally meeting	1	-1	1	1
	Create (functional) cores and routes leading there	2	-1	-1	1
	Limit (infrastructural) barriers in the area	2	-1	-1	1
Character	Develop places of belonging	1	0	2	1
	Develop places of inspiration & creativity	0	0	1	0
	Create coherence between citizens	1	0	2	1
	Pay attention to 'soft' planning and temporary urbanism	0	0	1	0
	Develop places of identity	1	0	2	1
Enclosure	Develop safe places	1	-1	1	1
	Create coherence and work on community-building	1	0	2	1
	Protect the human scale in the design	1	-1	1	1
Activity & Use	Develop places that serve and stimulate different uses	1	0	2	1
	Develop cores where different uses come together	2	-1	1	1
	Develop mixed-use and protect the development of diverse housing & functions	2	0	0	1
	Develop places of spontaneous use and interaction	0	0	1	0
	Develop unprogrammed places	0	0	1	0
	Create access to necessities for all	2	-1	1	1
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	2	-2	-2	-1
	Develop accessible and connecting places, with special attention to slow traffic and public transport	2	-1	-1	1
	Develop sustainable and healthy places	2	-2	-2	-1
	Develop nature-based public places and create a right balance between building density and public space	1	-2	-2	-1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	2	0	0	1
	Create social & spatial adaptability by doing temporary development	0	0	1	0
	Attract different population groups to the area	2	0	0	1
	Leave space for small-scale initiatives during the development process	-2	1	1	-2
Movement	Develop walkable and bikeable areas	2	-1	-1	1
	Create connections that serve a bigger area	2	-1	-1	1
	Create cores and routing towards them	2	-1	-1	1
	Develop continuous landscapes without barriers	2	-1	-1	1
	Create safe movement	2	-1	-1	1
	Create movement flows that stimulate interaction and meeting	0	0	1	0
(Climate) Adaptation	Develop sustainably and climate adaptive	2	-2	-2	-1
	Develop nature-based	1	-2	-2	-1
	Develop efficient building and transport	2	0	0	1
	Give a voice to nature in the decision-making process	1	-2	-2	-1
Development Process	Allow bottom-up development	-2	1	2	-2
	Place users centrally in the decision-making	1	0	1	0
	Pay attention to temporary urbanism	-1	0	1	-1
	Bring opportunities for citizens to protest and debate	-1	1	1	-1
	Give public actors bigger powers than private actors	-1	2	2	-1
	Allow everyone to benefit from public investments	-1	1	1	-1
	Scoring	38	-19	10	8

Table 18: Assessment limiting infrastructural barriers, using the Just City Framework

6.3 Mobility & Connectivity
Design Typologies Assessment Model

Conclusion

This chapter examined the theme of Mobility & Connectivity and looked at several possible basic design solutions to the requirements of this theme. The theme included the Elements of Urban Form Continuity & Legibility and Movement. Different typologies for the objectives of the elements were developed and assessed using the Just City Framework as an assessment model. From this, an outline was derived of how each typology does or does not contribute to the creation of a Just City environment.

Table 19 provides a concluding overview of each typology examined and assessed. It shows exactly how the typology does or does not contribute to creating a Just City. This provides designers and decision makers with information on the use of these basic typologies in urban development. In doing so, it contributes to a better understanding of how to design a Just City at an early stage of the process. It also provides a starting point for stakeholder discussions.

Figure 121: Design theme Mobility & Connectivity

Typology	Score	Effect
	-16	+ Contributes to the creation of less congested streets and thus safety - Limits the formation of identity and community-building
	27	+ Contributes to the creation of car-free areas and increases walkability and accessibility for slow traffic + Contributes to creating quality places and gives attention to community building and identity - Threat of busy roads becoming unsafe and neglected
	31	+ Contributes to walkable places and attention to slow traffic + Contributes to the creation of places of belonging + Contributes to the creation of active and accessible places and to the development of urban cores - Threat of overly congested and unsafe roads
	38	+ Contributes to physical and mental health by limiting noise and air pollution. + Contributes to creating additional space for housing and other functions. + Contributes to more green space - High costs are associated with a threat of dependence on private actors.
	-19	+ Not expensive and cost-effective - No mitigation of air and noise pollution - Little quality is added to the place - Infrastructure barrier remains
	10	+ Contributes to community-building and the development of places of identity + Not expensive and cost-effective + Placemaking creates opportunities for temporary development and bottom-up initiatives - No reduction of air and noise pollution - Solution is still separating city districts
	8	+ Contributes to the reduction of infrastructural barriers. + Efficient use of space creates opportunities for new development. - No reduction in air and noise pollution. - High costs are associated with a threat of dependence on private actors.
	43	+ Contributes to community-building and the development of places with their own identity + Demotivates car use and creates focus on slow movement + Creates vibrant public spaces - Special attention to safety is needed - Focuses on small scale only
	48	+ Contributes to creating places of belonging + Contributes to creating safe places + Contributes to creating vibrant places + Contributes to community-building - Focused on only the small-scale
	35	+ Contributes to creating access to urban cores + Contributes to creating large-scale connections + Demotivates car-use and creates attention to slow movement - special attention to safety is needed
	-6	+ Contributes to creating accessible places + Contributes to creating efficient transport + Contributes to limiting pressure on other streets - Special attention to safety is needed - Street doesn't contribute to community-building and protecting the human scale - Street doesn't contribute to creating places of identity
	40	+ Contributes to creating accessible places + Contributes to creating efficient transport + Contributes to limiting pressure on other streets + Contributes to creating vibrant places + Contributes to community-building and accidentally meeting + Demotivates car-use

Table 19: Overview of typologies of the design theme Mobility & Connectivity and their contribution to a Just City

6.3 Mobility & Connectivity
Design Typologies Assessment Model

The figure to the right summarizes how each typology contributes to each element of city design of the Just City Framework. It illustrates step 4 of the 5-Step Methodology and provides a Design Typologies Assessment Model. This model gives a detailed understanding of the effect of particular design choices on particular elements of the complex concept of a Just City. This table provides useful insight into how the topic of mobility and connectivity can be designed to contribute to the creation of a Just City environment. Although the typologies must be adjusted to context-specific conditions before they can be applied, Appendix A.3 demonstrates the value of this model in practice.

Typology	Continuity & Legibility	Character	Enclosure	Activity & Use	Quality of Public Realm	Mixture (Diversity)	Movement	(Climate) Adaptation	Development Process	Total
No Hierarchy										-16
Main roads around the area										27
Main roads through the area										31
Shared street										43
Pedestrian street										48
Bike-oriented street										35
Car-oriented street										-6
Public transport-oriented street										40
Hiding										38
Accepting										-19
Embedding										10
Rerouting & Combining										8

Scoring Legend

- -4 or less
- -2 or -3
- -1
- 0
- 1
- 2 or 3
- 4 or more

Figure 122: Design Typologies Assessment Model for the design theme Mobility & Connectivity

6.4 Functional Configuration
Development of typologies

The second design theme explored in this chapter is the Functional Configuration theme. This theme encompasses the principles and values of two of the Elements of Urban Form from the Just City Framework, namely Mixture (Diversity) and Activity & Use.

The table below shows the key planning and design principles of these two Elements of Urban Form and illustrates the overlap between the objectives. For both elements, it is important to engage in mixed-use development and opt for temporary development. These principles are the starting point for developing typologies for this design theme.

Figure 123: Design theme Functional Configuration

Element of Urban Form (Circle 1)	Just City Values (Circle 2)	Planning & Design Principles (Circle 3)	Leading Strategy (Circle 4)
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses	Mixed-use development and central places in which spontaneous use is stimulated
		Develop cores where different uses come together	
		Facilitate community-building and urban participation	
		Develop mixed-use and protect the development of diverse housing & functions	
		Develop places of spontaneous use and interaction	
		Develop unprogrammed places	
		Allow users to participate in the development of places	
		Create access to necessities for all	
		Do temporary development that allows space to adjust to changes in uses	
		Allow economy to grow and create a diversity of jobs	
Mixture (Diversity)	Acceptance Choice Engagement Fairness Power Rights	Develop mixed-use and accessible housing and functions for all	Mixed-use and temporary development that fulfills the needs of all
		Create social & spatial adaptability by doing temporary development	
		Attract different population groups to the area	
		Create a fair distribution of resources	
		Develop an environment that creates tolerance and coherence	
		Leave space for small-scale initiatives during the development process	
		Develop regulations that promote fair housing and functions	
		Create and stimulate job opportunities for all and economic progress	

Table 20 Elements of Urban Form, included in the design theme Functional Configuration

6.4 Functional Configuration
Development of typologies

Mixed-use typologies
In addition, different typologies for mixed-use development on a neighborhood scale are shown. These typologies show a different interpretation of the concept of mixed-use at the neighborhood scale and illustrate how it can be interpreted. Below, these typologies are explained further.

Figure 124: Mixed-use typologies

Typology 1: Monofunctional development
In the first typology, monofunctional development, there is no differentiation between functions. All functions are the same, for example, housing or offices. This typology doesn't contribute to the creation of a Just City since it doesn't allow for mixed development and attracting different users.

Figure 125: Monofunctional development

Typology 2: Equal mixing
The second typology is that of equal mixing. In this variant of mixed development, each block consists of an equal distribution between functions. While this seems like a good typology and a proper translation of the principle of "mixed development," it also negatively affects other requirements for a Just City. For example, there is less reason to move through an area, which does not encourage spontaneous interactions. Equal mixing also does not result in a clear core, and because there is no clustering and diversity in the landscape, it does not allow for economic growth and progress.

Figure 126: Equal mixing

Typology 3: Monofunctional blocks with differentiation

In the second typology, there is mixing of functions, but not at every scale level. Between the blocks there is mixing, but in the blocks themselves there is only one function. This leads to a situation where there is more reason to move through the area, but it is questionable whether this leads to more spontaneous interaction and an increase in community-building. It also risks not creating an all-encompassing identity in the area and there is still no functional core that serves a larger part of the city.

Figure 127: Monofunctional blocks with differentiation

Typology 4: Mixing with leading characteristic

The fourth typology again brings a new interpretation to the theme of mixed-use development. It creates blocks with mixed uses, yet gives a guiding characteristic to the block. For example, there is a block that has a characteristic of office buildings but also contains housing and a library. This theme gives a strong identity to a place and gives reasons to move through an area. However, there is still no strong functional core.

Figure 128: Mixing with leading characteristic

Typology 5: Mixed-use clusters

The last typology, typology 5, focuses on creating mixed-use clusters. This means that a group of blocks together form a cluster and have a leading characteristic. Yet, there are other functions in this cluster that make it mixed-use and provide interaction between different users in the area. This typology meets many of the requirements for a Just City. For instance, it allows for different flows of spontaneous gatherings, allows for a functional core and gives identity to a place.

Figure 129: Mixed-use clusters

Conclusion

The following assesses the various typologies, using the Just City Framework as an assessment model. This provides insight into how each typology does or does not contribute to creating a Just City environment.

It shows that typology 5 is best suited to creating a Just City. It contributes by creating flows of movement and therefore interaction and connectivity and by creating urban cores.

Element of Urban Form (Circle 1)	Planning & Design Principles (Circle 3)	Typology 1 (Mon-ofunctional development)	Typology 2 (Equal Mixing)	Typology 3 (Mon-ofunctional Blocks)	Typology 4 (Leading Characteristic)	Typology 5 (Mixed-use Clusters)
Continuity & Legibility	Develop routing of accidentally meeting	-2	0	1	2	2
	Create landmarks for orientation	-1	1	0	1	2
	Create (functional) cores and routes leading there	-2	0	1	1	2
Character	Develop places of belonging	-1	0	0	1	2
	Develop places of inspiration & creativity	-2	0	0	1	2
	Develop places of spontaneity	-2	0	0	1	2
	Create coherence between citizens	-1	1	1	2	2
	Develop places of identity	-2	0	0	1	2
Enclosure	Create coherence and work on community-building	-1	1	1	2	2
Activity & Use	Develop places that serve and stimulate different uses	-2	-1	1	2	2
	Develop cores where different uses come together	-2	0	1	1	2
	Facilitate community-building and urban participation	-1	1	1	2	2
	Develop mixed-use and protect the development of diverse housing & functions	-2	2	1	2	2
	Develop places of spontaneous use and interaction	-2	0	0	1	2
	Allow users to participate in the development of places	-1	1	1	2	2
	Create access to necessities for all	-2	0	0	1	2
Quality of the Public Realm	Develop places of character but with attention to own interpretation	-2	0	0	1	2
	Develop accessible and connecting places, with special attention to slow traffic	-2	0	1	1	2
Mixture (Diversity)	Develop mixed-use and accessible housing and functions for all	-2	2	2	2	2
	Attract different population groups and users to the area	-2	2	2	2	2
	Create and stimulate job opportunities for all and economic progress	-2	1	1	2	2
Movement	Create connections that serve a bigger area	-2	0	1	1	2
	Create cores and routing towards them	-2	0	1	1	2
	Create movement flows that stimulate interaction and meeting	-2	0	1	1	2
	Scoring	-42	11	18	34	48

Table 21: Assessment typologies for mixed-use development, using the Just City Framework

6.4 Functional Configuration
Development of typologies

Mixed-use buildings

Not only is it important to design mixed-used at the neighborhood scale, it is also important at the block and building scale. Again, there are different variations on how mixed-use can be developed at the building scale. For example, one can choose to create mixed-use in a vertical way, in a horizontal way or in a random way. These typologies are shown to the right.

Monofunctional development

Vertical mixing

Horizontal mixing

Random mixing

Figure 130: Typologies for mixed use buildings

Typology 1: No mixing
In the first typology, no mixing, buildings are developed with a single use. While this may still be a function that serves as a placemaker, it does not contribute much to creating a Just City. It does not bring together uses or create spontaneous interactions. Nor does it contribute much to community-building and connecting people.

Figure 131: Monofunctional building

Typology 2: Vertical mixing
One could choose to create mixed-use buildings in an area by vertical mixing. In this form, functions are distributed vertically. For example, there are terraces and public functions at the bottom of the building, offices in the middle and housing at the top of the building. This affects the direct public space around the building. This is because the public space would serve the lowest function, in this example the public functions.

In this form, people could be drawn to the building primarily for the lowest function and public space. It could be a place where people meet because they are attracted to the place because of its function. The typology acts as an attractor and contributes to the creation of a Just City in several ways.

Figure 132: Vertical mixing

6.4 Functional Configuration
Development of typologies

Typology 3: Horizontal mixing
In the third typology, there are buildings in which horizontal mixing is used. In this form, the different functions are mixed horizontally and the functions are next to each other. This has a different impact on the use of public space than typology 2. In this typology, the public space immediately adjacent to the building favors that function. For example, the public space in front of the orange building directly benefits that function. In this, the public space user moves through different public spaces as he or she walks through the urban landscape.

This form also serves aspects and certain goals of a Just City in different ways. In this form, there is a strong sense of belonging and identity in a place. Yet, there remains movement between these identities and people experience each other's territory, contributing to tolerance and connectedness.

Figure 133: Horizontal mixing

Typology 4: Random mixing
The last typology is that of random mixing. This typology also affects the use of public space. In this type of mixed-use building, public space is not directly assigned to a particular function. All functions in the building come into play and the use of the space can be chosen in different ways. There is no clear destination for the public space and no direct identity.

This form of mixed-use development also contributes to the creation of a Just City. This typology encourages the creation of unprogrammed places and spontaneous use.

Figure 134: Random mixing

Conclusion

While the development of mixed-use at the neighborhood scale requires a choice between different forms, different types of mixed-use at the building scale can complement each other. As shown earlier, different forms of mixed-use contribute in different ways to the creation of a Just City. Therefore, it is desirable to use all of these forms in urban development in a blended manner. Choosing different forms in different locations can contribute to a Just City.

As described, the different forms serve different needs for urban development. The vertical mixed form is used as placemaker, the horizontal form of mixed buildings is used as community-builder and the last form, random mixing, is used for spontaneity and unprogrammed places.

Placemaking   Community-building   Spontaneous use

Figure 135: Conclusions

Element of Urban Form	Design Principle	Typology 1: No Mixing	Typology 2: Vertical Mixing	Typology 3: Horizontal Mixing	Typology 4: Random Mixing
Continuity & Legibility	Develop routing of accidentally meeting	0	2	1	2
	Create landmarks for orientation & do placemaking	0	2	1	1
	Create (functional) cores and routes leading there	0	2	0	0
Character	Develop places of belonging	0	1	2	1
	Develop places of spontaneity	-1	1	1	2
	Create coherence between citizens	0	2	2	1
	Pay attention to 'soft' planning and temporary urbanism	-1	0	2	2
	Develop places of identity	0	2	1	2
Enclosure	Create coherence and work on community-building	0	1	2	1
Activity & Use	Develop places that serve and stimulate different uses	-2	1	1	2
	Develop cores where different uses come together	0	2	0	0
	Facilitate community-building and urban participation	0	1	2	1
	Develop mixed-use and protect the development of diverse housing & functions	-2	2	2	2
	Develop places of spontaneous use and interaction	0	1	1	2
	Develop unprogrammed places	-1	0	0	2
	Allow users to participate in the development of places	0	1	2	2
Quality of the Public Realm	Develop places of character but with attention to own interpretation	0	1	2	1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	-2	2	2	2
	Attract different population groups to the area	-2	2	2	2
	Create a fair distribution of resources	-2	2	2	2
	Develop an environment that creates tolerance and coherence	0	1	2	1
Movement	Create cores and routing towards them	0	2	0	0
	Scoring	-13	31	28	31

Table 22: Assessment typologies for mixed-use buildings, using the Just City Framework

6.4 Functional Configuration
Development of typologies

Temporary development
Not only mixed use, but also temporary development is important for creating a Just City. It creates social adaptability and makes it possible to create functions for changes in demand.

Temporary development can come about in different ways. There are two typologies for this, temporary development in permanent buildings and temporary development in temporary buildings. Below, these typologies are explained and then assessed using the Just City Framework as an assessment model.

Temporary development in fixed buildings

Temporary development in temporary buildings

Figure 136: Typologies for temporary development

Typology 1: Temporary development in fixed buildings
The first typology of temporary development involves temporary functions in contemporary buildings. Examples are the NDSM Werf and Multifunk in Amsterdam-North. The NDSM Werf is an old industrial building that now houses temporary creative industries. Multifunk is a building that is now being developed for housing, but could easily be transformed into offices or other functions. These flexible developments contribute to the creation of a Just City in several ways. Tom van Tuijn Stedenbouw (2018) explains that temporary development in this form leads to an urban environment with housing and functions that can adapt and anticipate temporary market conditions. It also provides space for innovative ideas. For example, temporary development can be used to test a new circular system or new housing concepts. Van Tuijn Stedenbouw's argument shows that temporary development in the form of permanent buildings contributes to the creation of adaptable and sustainable urban environments.

Figure 137: Temporary development in fixed buildings

Photo 26: "Smederij NDSM" (Wikipedia/Marion Golsteijn, 2011)

Typology 2 Temporary development in temporary buildings
In addition to creating temporary uses in permanent buildings, it is also possible to create temporary developments using temporary buildings. An example is the container homes in Amsterdam West (I Amsterdam, n.d.). This was a project that was on the site while new plans were being made. It was a temporary project that allowed for efficient use of space during a development process and the creation of vibrant urban areas.

This type of temporary development also helps to create a Just City. It makes it possible to create vibrant and safe urban areas during a process. It also allows a place to gain an identity during a process, contributing to Just City values such as creativity and engagement. Finally, it ensures efficient use of space and a fair distribution of resources.

Figure 138: Temporary development in temporary buildings

Photo 27: "Containerwoningen Amsterdam-Noord 2014" (Wikipedia/Steven Lek, 2014)

6.4 Functional Configuration
Development of typologies

Conclusion
Also for temporary development, multiple forms are desirable in urban development. Both forms explained on this page contribute to creating a Just City, but in different ways. Therefore, it is important to apply both concepts in urban developments.

Element of Urban Form (Circle 1)	Planning & Design Principles (Circle 3)	Typology 1 (Temporary uses in permanent buildings)	Typology 2 (Temporary uses in temporary buildings)
Character	Develop places of inspiration & creativity	1	1
	Develop places of spontaneity	2	2
	Pay attention to 'soft' planning and temporary urbanism	2	2
	Develop places of identity	1	1
Enclosure	Develop safe places	1	2
	Create coherence and work on community-building	1	1
	Develop social safety	1	1
Activity & Use	Develop places that serve and stimulate different uses	2	2
	Facilitate community-building and urban participation	2	1
	Develop mixed-use and protect the development of diverse housing & functions	2	2
	Develop places of spontaneous use and interaction	1	1
	Develop unprogrammed places	2	1
	Allow users to participate in the development of places	2	2
	Create access to necessities for all	1	1
	Do temporary development that allows space to adjust to changes in uses	2	2
Quality of PR	Develop places of character but with attention to own interpretation	1	1
Mixture (Diversity)	Develop mixed-use and accessible housing and functions for all	2	2
	Create social & spatial adaptability by doing temporary development	2	2
	Attract different population groups to the area	1	1
	Create a fair distribution of resources	1	1
	Develop an environment that creates tolerance and coherence	1	1
	Leave space for small-scale initiatives during the development process	2	2
	Develop regulations that promote fair housing and functions	1	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1	1
	Develop efficient building and transport	2	2
	Re-use buildings and building materials	2	2
	Stimulate human behaviour that protects nature	2	1
Development process	Place users centrally in the decision-making	2	2
	Pay attention to temporary urbanism	2	2
	Scoring	45	44

Table 23: Assessment typologies for temporary development, using the Just City Framework

6.5 Functional Configuration
Design Typologies Assessment Model

Conclusion

The table to the right summarizes the scores of the typologies belonging to the Functional Configuration theme. It shows exactly how each topology contributes or does not contribute to the creation of a Just City environment. This provides input for urban planners, designers and other stakeholders in the urban development process.It shows not only a comparative score, but also why a typology does or does not contribute. It provides design solutions based on scientific knowledge. How they can be used in practice is explained in Appendix A.3.

4 Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme

4 Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme

Figure 139: Design theme Functional Configuration

Typology	Score	Effect
	-42	- No differentiation of uses - Little spontaneous interactions between different population groups - Doesn't contribute to the creation of urban cores
	11	+ Contributes to developing mixed-use and attracting different uses to an area - Little reason to move through an area - Doesn't contribute to the creation of urban cores
	18	+ Contributes to developing mixed-use and attracting different uses to an area + Reason to move through an area and stimulation of spontaneous interactions - Doesn't contribute much to the creation of urban cores - Mixed-use on smallest scale is limited
	34	+ Contributes to developing mixed-use and attracting different uses to an area + Clustering contributes to economic growth and community-building - Not yet a strong functional core
	48	+ Contributes to developing mixed-use and attracting different uses to an area + Reason to move through an area and stimulation of spontaneous interactions + Clustering contributes to economic growth and community-building + Creation of a strong functional core
	-13	+ Contributes bybeing a placemaker - No differentiation of uses - Little spontaneous interactions between different population groups
	31	+ Contributes bybeing a placemaker + Contributes to developing mixed-use and attracting different uses to an area + Contributes to community-building on a bigger scale + Contributes to the creation of urban cores
	28	+ Contributes to community-building on a small scale + Contributes to developing mixed-use and attracting different uses to an area + Contributes to creating movement and spontaneous interactions
	31	+ Contributes to the creation of unprogrammed places + Contributes to developing mixed-use and attracting different uses to an area + Contributes to creating spontaneous interactions
 Temporary development in fixed buildings	45	+ Contributes to allowing temporary development + Contributes to allowing bottom-up initiatives + Contributes to creating adaptable developments + Contributes to developing innovative initiatives and sustainable developments
 Temporary development in temporary buildings	44	+ Contributes to allowing temporary development + Contributes to allowing bottom-up initiatives + Contributes to creating adaptable developments + Contributes to developing innovative initiatives and sustainable developments + Contributes to making efficient use of space.

Table 24: Overview of typologies of the design theme Functional Configuration and their contribution to a Just City

6.5 Functional Configuration
Design Typologies Assessment Model

The figure to the right further explains the scores from the previous page. It shows exactly the score of each Element of Urban Form from the Just City Framework. This gives an overview of how each typology contributes or does not contribute and provides insight not only into the typology itself, but also into how typologies can best be combined. For example, if a typology scores low on the Continuity & Legibility element, it is best combined with a typology that scores high on this element so that the typologies balance each other out. It shows the product resulting from the fourth step of the 5-Step Methodology.

	Continuity & Legibility	Character	Enclosure	Activity & Use	Quality of Public Realm	Mixture (Diversity)	Movement	(Climate) Adaptation	Development Process	
Monofunctional Development	●	●	·	●	●	●	●			-42
Equal Mixig	●	●	●	●		●				11
Monofunctional blocks with differentiation	●	●	●	●	●		●			18
Mixing with leading characteristic	●	●	●	●	●	●	●			34
Mixed-use clusters	●	●	●	●	●	●	●			48
No mixing		●		●		●				-13
Vertical mixing	●	●	●	●	●	●	●			31
Horizontal mixing	●	●	●	●	●	●				28
Random mixing	●	●	●	●	●	●				31
Temporary development in fixed buildings		●	●	●	●	●		●	●	45
Temporary development in temporary buildings	●	●	●	●	●			●	●	44

Scoring

Figure 140: Design Typologies Assessment Model for the design theme Functional Configuration

6.6 Public Space Development
Development of typologies

The third design theme explored in this research is Public Space Development. This theme includes the planning and design principles of the three Elements of Urban Form: Character, Activity and Use and Quality of Public Realm. It examines where public spaces should be created and how they can and should be designed. It optimizes the planning and design principles of the three Elements of Urban Form and the study evaluates how this affects the other elements.

The table below presents again the key planning and design principles of the three Elements of Urban Form that could be achieved through Public Space Development. These principles are the starting point from which this design theme is examined.

Public Space Development

Figure 141: Design theme Public Space Development

Element of Urban Form (Circle 1)	Just City Values (Circle 2)	Planning & Design Principles (Circle 3)	Leading Strategy (Circle 4)
Character	Acceptance Aspiration Choice Identity	Develop places of belonging	Placemaking between beauty & chaos
		Develop places of inspiration & creativity	
		Develop places of spontaneity	
		Create coherence between citizes	
		Pay attention to 'soft' planning and temporary urbanism	
		Develop places of identity	
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses	Mixed-use development and central places in which spontaneous use is stimulated
		Develop cores where different uses come together	
		Facilitate community-building and urban participation	
		Develop mixed-use and protect the development of diverse housing & functions	
		Develop places of spontaneous use and interaction	
		Develop unprogrammed places	
		Allow users to participate in the development of places	
		Create access to necessities for all	
		Do temporary development that allows space to adjust to changes in uses	
		Allow economy to grow and create a diversity of jobs	
Quality of the Public Realm	Identity Mobility Resilience Welfare	Develop qualitative and healthy places, mentally & physically	Sustainable and nature-based places which create physical and mental health
		Develop places of character but with attention to own interpretation	
		Develop accessible and connecting places, with special attention to slow traffic	
		Develop sustainable and healthy places	
		Develop nature-based public places and create a right balance between building density and public space	

Table 25: Elements of Urban Form included in the design theme Public Space Development

6.6 Public Space Development
Development of typologies

Morphological strategy
There are several morphological strategies for developing public spaces. One can choose to establish hierarchy between places, while one can also choose a continuous landscape in which no hierarchy exists. In addition, different typologies are shown on how public space could be designed. These typologies are further elaborated below. Then they are also assessed against the Just City Framework.

No hierarchy

One central public space

Network of public spaces without hierarchy

Network of public spaces with hierarchy

Linear public space through an area

Figure 142: Morphological strategies public space development

Typology 1: No hierarchy
In the first typology, there is no hierarchy in the use of public space. This means that there are no preferred places over others and there is a continuous landscape of equally important public space. This form influences the creation of a Just City environment. It provides cohesion but does not contribute to the creation of urban cores, places of spontaneity and community-building. Therefore, this type of morphology does not contribute much to the creation of a Just City.

Figure 143: No hierarchy

Typology 2: One central public space
The second typology opts for one central public space. All roads lead to this central place and therefore it contributes to community-building on a larger scale and creating interaction. Moreover, it facilitates an urban core. Nevertheless, it contributes little to community-building on a block scale. There is also no differentiation between public spaces, making it difficult to give different identities and different programs.

Figure 144: One central public space

Typology 3: Network of public spaces without hierarchy
In the third typology, there is a network of public spaces, but there is no differentiation or hierarchy among these public spaces. This form creates access to public spaces within a certain proximity for all city residents and therefore contributes to creating access to necessities for all. It also contributes to community-building on a block scale. Still, there is little incentive to move through the area and therefore it does not encourage larger-scale community-building and spontaneous interactions.

Figure 145: Network of public spaces without hierarchy

Typology 4: Network of public spaces with hierarchy
In this typology, there is also a network of public spaces, but now with hierarchy and differentiation. For example, the orange public spaces in the image to the right illustrate local public spaces, while the blue shows a big public space where people congregate on a larger scale. This form contributes to many aspects of creating a Just City environment, as it helps community-building on both large and small scales, but also encourages movement through the area because there is a reason to visit other public spaces. It also helps to establish an urban core and create access to necessities for all.

Figure 146: Network of public spaces with hierarchy

Typology 5: Linear public space through an area
Typology 5: Linear public space through an area
The last typology illustrates a form where a linear public space runs through an area. This form also contributes well to the creation of a Just City because it is accessible from all directions and helps to establish qualitative connections on a larger scale. People move through and cross public space, encouraging spontaneous interactions.

Figure 147: Linear public space

Conclusion
The table below illustrates the assessment of the previously explained typologies. This provides insight into how the different typologies do or do not contribute to the creation of a Just City environment.

The table shows that the first typology has a negative effect on the creation of a Just City. Although this typology seems to create equality, it does not lead to community-building and identity creation. The best contribution is made by the fourth and fifth typologies. These typologies manage to establish both large-scale and small-scale connections and identities, creating an environment in which many Just City Values are established.

Element of Urban Form (Circle 1)	Planning & Design Principles (Circle 3)	Typology 1 (No hierarchy)	Typology 2 (One primary place)	Typology 3 (Network of equally used public spaces)	Typology 4 (Network of public spaces with hierarchy)	Typology 5 (Linear public space through the area)
Continuity & Legibility	Develop routing of accidentally meeting	-1	1	2	2	2
	Develop coherence in routing and orientation	2	0	0	0	1
	Create landmarks for orientation	-1	1	1	2	1
	Create (functional) cores and routes leading there	-1	2	0	2	1
Character	Develop places of belonging	-1	1	1	2	1
	Develop places of inspiration & creativity	-1	1	-1	1	0
	Develop places of spontaneity	-1	1	1	2	2
	Create coherence between citizens	-1	1	1	2	2
	Develop places of identity	-1	1	1	2	1
Enclosure	Create coherence and work on community-building	-1	1	1	2	2
	Develop social safety	-1	1	1	2	2
	Protect the human scale in the design	0	-1	1	1	1
Activity & Use	Develop places that serve and stimulate different uses	-1	-1	-1	2	2
	Develop cores where different uses come together	-1	1	1	2	2
	Facilitate community-building and urban participation	-1	1	1	2	2
	Develop places of spontaneous use and interaction	-1	1	1	2	2
	Develop unprogrammed places	1	-1	-1	2	1
	Create access to necessities for all	1	1	1	2	2
	Do temporary development that allows space to adjust to changes in uses	1	0	0	1	1
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	0	0	1	1	1
	Develop places of character but with attention to own interpretation	-1	-1	-1	1	1
Mixture (Diversity)	Develop an environment that creates tolerance and coherence	-1	1	1	2	2
Movement	Develop walkable and bikeable areas	1	-1	0	0	0
	Create connections that serve a bigger area	-1	1	1	2	2
	Create cores and routing towards them	-1	1	1	2	2
	Create safe movement	1	-1	0	0	0
	Create movement flows that stimulate interaction and meeting	-1	1	1	2	2
Development Process	Allow everyone to benefit from public investments	2	-2	1	1	2
	Scoring	-10	11	15	44	40

Table 26: Assessment typologies for morphological structure, using the Just City Framework

Public space typologies
There are different types of public spaces. For example, there are public spaces created around infrastructural nodes, public spaces based on nature, public spaces around public functions and public spaces around housing (community-based). They all have different characteristics and can contribute differently to the creation of a Just City. Below is an elaboration of the public spaces written and an assessment made using the Just City Framework as an assessment model.

Typology 1: Public spaces around infrastructural nodes
Public spaces around infrastructure nodes can have a positive impact on creating a Just City environment. The advantage of these places is that different flows of movement converge and thus spontaneous interactions occur. This happens on a small scale, but also on a large scale. Also, these places are lively and active. Nevertheless, extra attention must be paid to safety.

Typology 2: Public spaces around nature
There are also public spaces around nature, such as parks. These places bring quality because they are green and therefore healthy and encourage activity. They are also often free to use and therefore encourage spontaneous activities and interactions.

Typology 3: Public spaces around functions
In the third typology, public spaces are created around central functions. These include terraces or central plazas where people congregate. These places help to establish a Just City environment because placemaking is created and it provides places where people come together. It also helps to create central cores.

Typology 4: Public spaces around housing
Finally, there are also public spaces around housing. These places contribute to quality on a smaller scale. It allows for community-building and spontaneous interactions between citizens.

Figures 148 to 151: Typologies of characters of public spaces

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Conclusion
The table below shows the assessment of the different typologies, illustrating the quality of each type of public space and how it can be used to create a Just City environment.

It can be seen that the typologies score equally high in the assessment. This shows that it is not necessary to choose between types of public space but to apply them simultaneously. Above all, the overview shows that they have different positive influences on a Just City environment.

Element of Urban Form	Design Principle	Typology 1: Public spaces around infrastructural nodes	Typology 2: Public spaces around green infrastructure	Typology 3: Public spaces around functions	Typology 4: Public spaces around housing
Continuity & Legibility	Develop routing of accidentally meeting	2	2	1	1
	Create landmarks for orientation & do placemaking	2	0	1	0
	Create (functional) cores and routes leading there	2	0	2	0
	Limit (infrastructural) barriers in the area	1	0	0	0
Character	Develop places of belonging	1	1	2	2
	Develop places of spontaneity	2	2	1	1
	Create coherence between citizens	1	1	1	2
	Develop places of identity	1	1	1	1
Enclosure	Develop safe places	-1	0	0	0
	Create coherence and work on community-building	1	1	1	2
	Develop social safety	1	1	1	2
	Protect the human scale in the design	1	0	1	1
Activity & Use	Develop places that serve and stimulate different uses	2	1	1	1
	Develop cores where different uses come together	2	1	2	1
	Facilitate community-building and urban participation	1	1	1	2
	Develop places of spontaneous use and interaction	2	2	1	1
	Create access to necessities for all	1	1	2	1
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	1	2	1	1
	Develop places of character but with attention to own interpretation	1	1	1	1
	Develop sustainable and healthy places	1	2	1	1
	Develop nature-based public places and create a right balance between building density and public space	1	2	1	1
Mixture (Diversity)	Develop an environment that creates tolerance and coherence	1	1	1	2
	Create and stimulate job opportunities for all and economic progress	1	1	2	1
Movement	Develop walkable and bikeable areas	2	1	1	1
	Create connections that serve a bigger area	2	1	2	1
	Create cores and routing towards them	2	1	2	1
	Create movement flows that stimulate interaction and meeting	2	1	1	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1	2	1	1
	Develop nature-based	1	2	1	1
	Stimulate human behaviour that protects nature	0	1	0	0
	Give a voice to nature in the decision-making process	0	2	0	0
Development Process	Place users centrally in the decision-making	2	2	2	2
	Scoring	40	37	36	33

Table 27: Assessment typologies for public spaces, using the Just City Framework

6.6 Public Space Development
Development of typologies

Public space design strategies
There are two strategies for public space design, namely formal design and flexible design. Below, these design strategies are explained and assessed using the Just City Framework.

Typology 1: Formal design
In the strategy of formal design, the design guides the use of public space and the public space is completely designed. The design determines how the public space should be used and activates users for a certain activity. This type of design can contribute to the creation of a Just City because it encourages people to participate in urban activities and this contributes to more involvement and tolerance in an urban area. Formal design can be used when a certain activity is desirable and people need to be encouraged.

Figure 152: Formal design

Typology 2: Flexible design
The opposite of formal design is flexible design. In this case, a place is not completely designed and there is room for the user's own interpretation. This form of public space design also contributes in some way to the creation of a Just City. It contributes to the creation of spontaneous places and unprogrammed places. This contributes to the values of spontaneity and expression.

Figure 153: Flexible design

6.6 Public Space Development
Development of typologies

Conclusion
Below, the two types of designing are explained by the Just City Framework. It shows how the different types contribute in different ways. Therefore it is desirable that they are both being applied in an urban (re)development.

Element of Urban Form	Design Principle	Formal Design	Flexible Design
Continuity & Legibility	Develop routing of accidentally meeting	2	1
	Create landmarks for orientation & do placemaking	2	1
Character	Develop places of belonging	1	1
	Develop places of inspiration & creativity	1	1
	Develop places of spontaneity	1	2
	Create coherence between citizens	1	1
	Pay attention to 'soft' planning and temporary urbanism	1	2
	Develop places of identity	1	1
Enclosure	Create coherence and work on community-building	1	1
Activity & Use	Develop places that serve and *stimulate* different uses	2	1
	Develop cores where different uses come together	2	1
	Facilitate community-building and *urban participation*	2	1
	Develop places of spontaneous use and interaction	1	2
	Develop unprogrammed places	1	2
	Create access to necessities for all	2	1
	Do temporary development that allows space to adjust to changes in uses	1	2
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	2	1
	Develop places of character but with attention to own interpretation	1	2
Mixture (Diversity)	Create social & spatial adaptability by doing temporary development	1	2
	Create a fair distribution of resources	2	1
	Develop an environment that creates tolerance and coherence	1	1
	Leave space for small-scale initiatives during the development process	1	2
Movement	Create movement flows that stimulate interaction and meeting	2	1
(Climate) Adaptation	Develop sustainably and climate adaptive	2	1
Development Process	Allow bottom-up development	1	2
	Pay attention to temporary urbanism	1	2
	Bring opportunities for citizens to protest and debate	1	2
	Scoring	37	38

Table 28: Assessment typologies for design strategy, using the Just City Framework

6.7 Public Space Development
Design Typologies Assessment Model

The development of typologies resulted in a summary of design solutions for the theme of Public Space Development. These design solutions are shown in the table on the page opposite and their scores are presented. The table also summarizes the contribution of each typology to creating a Just City environment. This not only provides insight into the score, but also where that particular score came from.

Figure 154: Design theme Public Space Development

Typology	Score	Contribution
	-10	- No stimulation of movement - No central places where people come together - Little reason for spontaneous interactions
	11	+ Central place where people come together + Stimulation of movement + Creation of an urban core - No differentiation between typologies of public spaces - Community-building only on a big scale but not on a smaller scale
	15	+ Central places where people come together + Stimulation of movement + Access to public spaces reachable for all - No creation of one single urban core - No differentiation between typologies of public spaces
	44	+ Central places where people come together + Stimulation of movement + Access to public spaces reachable for all + Creation of one single urban core + Differentiation between typologies of public spaces
	40	+ Central places where people come together + Stimulation of movement + Movement through public space + Public space accessible for all + Creation of big-scale connections
	40	+ Movement flows come together + Stimulation of spontaneous interactions + Vibrant places
	37	+ Healthy public spaces that increase physical and mental health + Places that activate + Sustainable and climate-adaptive public spaces
	36	+ Vibrant public spaces + Contributes to the creation of an urban core + Contributes to community-building on a bigger scale + Stimulates spontaneous interaction
	33	+ Contributes to community-building on a smaller scale + Stimulates spontaneous interaction + Contributes to developing places of belonging
	37	+ Design helps strongly to stimulate interaction and activity + Possibility to steer people and having them participating in urban activity
	38	+ Development of unprogrammed public spaces + Providing places of self-expression + Creating places of spontaneous use and creativity

Table 29: Overview of typologies of the design theme Public Space Development and their contribution to a Just City

6.7 Public Space Development
Design Typologies Assessment Model

The figure to the right again illustrates how each typology results in a score for each Element of Urban Form from the Just City Framework. It shows Step 4 of the 5-Step Methodology and results in an assessment model for design typologies. This provides insight into how the scores are constructed, but also provides a tangible model that can be used by any urban planner. It provides a scientific understanding of why a particular design intervention should be chosen and Appendix A.3 illustrates how this can be used in practice.

Scoring Legend

- ● -4 or less
- ● -2 or -3
- · -1
- 0
- · 1
- ● 2 or 3
- ● 4 or more

Figure 155: Design Typologies Assessment Model for the design theme Public Space Development

6.8 Building Forms
Development of typologies

The final design theme is that of Building Forms. In this theme, different forms are examined at different scales. This means that typologies are developed for larger morphological forms, forms of buildings are examined, and different forms of (re) development are explored. This includes the goals of three Elements of Urban Form from the Just City Framework. These are shown below and the objectives to which this theme contributes are highlighted.

Figure 156: Design theme Building Forms

Enclosure	Acceptance Engagement Welfare	Develop safe places
		Create coherence and work on community-building
		Develop social safety
		Protect the human scale in the design
		Find a right balance between public, semi-public & private space
Quality of the Public Realm	Identity Mobility Resilience Welfare	Develop qualitative and healthy places, mentally & physically
		Develop places of character but with attention to own interpretation
		Develop accessible and connecting places, with special attention to slow traffic
		Develop sustainable and healthy places
		Develop nature-based public places and create a right balance between building density and public space
(Climate) Adaptation	Resilience Welfare	Develop sustainably and climate adaptive
		Develop nature-based
		Develop efficient building and transport
		Re-use buildings and building materials
		Stimulate human behaviour that protects nature
		Give a voice to nature in the decision-making process

Table 30: Elements of Urban Form, included in the design theme Building Forms

6.8 Building Forms
Development of typologies

Morphology
For the Building Forms theme, typologies are created that say something about the urban form on a neighborhood scale. These typologies show different forms and structures in which a neighborhood could be developed. There is an orthogonal form, organic form, radial form and finally there could also be a patchwork of forms. Below, these forms are explained and assessed by the Just City Framework as an assessment model. Thus, their influence on the creation of a Just City can be seen.

Figure 157: Typologies for morphological structures

Typology 1: Orthogonal
The first typology is that in which the neighborhood takes the form of an orthogonal grid. This shape contributes in several ways to the creation of a Just City environment, but also disadvantages it. The orthogonal morphology creates long sightlines that contribute to good wayfinding and orientation. Moreover, placemakers are visible from afar and attract people. Thus, this will contribute to interaction and bringing people together on a larger scale. On the other hand, long sightlines do not contribute to enclosure on a smaller scale. Therefore, to create places of togetherness and enclosedness on a smaller scale, it is necessary to create courtyard gardens closed off from the larger roads. The orthogonal grid also creates many intersections. This contributes positively to creating interactions and places of accidental interaction On the other hand, pedestrians and cyclists must also cross roads frequently, which threatens the continuity of their path and creates unsafe movements. Finally, the orthogonal grid does not guide people anywhere. This disadvantages the creation of an urban core where people congregate.

Figure 158: Orthogonal structure

6.8 Building Forms
Development of typologies

Develop typologies for that design theme

Typology 2: Organic form
In the second typology, the organic form, roads are not arranged in a grid, but move fluidly through an urban area. This typology also simultaneously contributes and disadvantages some components of creating a Just City. First, the pattern has a positive influence on creating routing and placemaking. The pattern determines where movements converge and here, placemaking can be used for community-building. On the other hand, there are shorter sightlines than in the previous form. This means that wayfinding and orientation are more difficult for users and this threatens the legibility of the area. Nevertheless, the shorter sightlines create more enclosure and thus places of belonging. In this form, it is not always necessary to create courtyards or other enclosed areas to create urban enclosure, which contributes positively to the creation of a Just City environment.

Figure 159: Organic structure

Typology 3: Radial
Another typology of urban morphology is the radial form. In this form, there are several ring roads connected by radials. The advantages and disadvantages are a combination of those of the previous typologies. For example, this typology has short sightlines in the circles, but also long sightlines in the radials. The radials could therefore be used well for movement, as they contribute to Continuity & Legibility, while the circles could be used for residential streets in which a sense of enclosure and belonging is created. Also, the radials lead to a central point, where an urban core could be developed. In the intersections, interactions occur. Nevertheless, safety must be protected here and walkability and bikeability deserve extra attention.

Figure 160: Radial structure

Typology 4: Patchwork
The last typology is the form of a patchwork. In this patchwork, different structures are combined and come together at the boundaries. This typology contributes to the creation of a Just City because it creates different sub-areas in a larger area. This creates a sense of belonging and therefore contributes to inclusion. At the boundaries, people come together and interaction takes place. Long sightlines are created here that can be used for efficient movement. On the other hand, it can also be argued that the various structures disadvantage connections and community-building on a larger scale and threaten legibility on this larger scale. It can be concluded that this form contributes to creating a Just City environment on a smaller scale, but is disadvantageous on a larger scale.

Figure 161: Patchwork

Assess the typologies, using the Just City Framework

6.8 Building Forms
Development of typologies

Conclusion
There are several typologies for neighborhood-level morphology that contribute and detract from creating a Just City environment. The table below shows how they contribute or not and shows a final score.

It can be seen that the orthogonal form contributes the least to creating a Just City environment. Although this structure leads to good legibility and orientation, it also creates a lack of enclosure and creates unsafe movements. The organic form, on the other hand, leads to more enclosure, but threatens continuity. The radial form contributes the most because it combines the advantages of both orthogonal and organic form.

Element of Urban Form	Design Principle	Typology 1: Orthogonal	Typology 2: Organic	Typology 3: Radial	Typology 4: Patchwork
Continuity & Legibility	Develop routing of accidentally meeting	2	1	2	1
	Develop coherence in routing and orientation	2	1	2	0
	Create (functional) cores and routes leading there	0	1	2	0
Character	Develop places of belonging	0	1	1	1
	Develop places of spontaneity	1	2	2	1
	Create coherence between citizens	0	1	1	1
Enclosure	Develop safe places	-1	0	1	0
	Create coherence and work on community-building	0	1	1	1
	Develop social safety	0	1	1	1
	Protect the human scale in the design	0	1	1	1
Activity & Use	Develop cores where different uses come together	0	1	2	1
	Facilitate community-building and urban participation	0	1	1	1
	Develop places of spontaneous use and interaction	1	1	1	1
	Create access to necessities for all	1	1	2	1
Quality of the public realm	Develop accessible and connecting places, with special attention to slow traffic and public transport	1	1	2	1
Mixture (Diversity)	Develop an environment that creates tolerance and coherence	0	1	1	1
Movement	Develop walkable and bikeable areas	0	1	2	1
	Create connections that serve a bigger area	1	1	2	1
	Create cores and routing towards them	0	1	2	0
	Develop continuous landscapes without barriers	2	1	2	1
	Create safe movement	0	1	2	1
	Create movement flows that stimulate interaction and meeting	1	1	1	1
(Climate) Adaptation	Develop efficient building and transport	2	1	2	1
	Scoring	13	23	36	19

Table 31: Assessment typologies for morphological structure, using the Just City Framework

6.8 Building Forms
Development of typologies

Building transformations
Another aspect explored within the design theme Building Forms is the possibilities for the transformation of buildings. Transformation of buildings contributes to the goals for (Climate) Adaptation where the reuse of building materials is important.

In figure 162, some possibilities are shown. It shows how an existing block can be transformed and the types of public space that result. For example, the block can be transformed to create a fully public space or semi-private space. Fully private space in the form of a roof terrace can also be developed.

Below, the different typologies are explained and then assessed using the Just City Framework as an assessment model.

Existing Block
Current Situation

Open space fully public

Public space related to building

Semi-private space

Enclosed semi-private space

Private space

Figure 162: Typologies for building transformations

Typology 1: Fully public
The first transformation typology is one in which fully public space is created. This space can be used for mobility or public space. This form can help create a Just City in places where continuity is threatened or that are not walkable or bikeable. By creating more space, these values can be protected. On the other hand, it does not create space that belongs to the users of the block. Users cannot use it as an extension of their living space and be creative in it. Therefore, it does not contribute much to the values of creating places of belonging and identity.

Figure 163: Fully public

Typology 2: Public space related to building
In the second typology, public space is created that is not separated from public space but establishes a relationship with the building. In this typology, the created public space can act as a placemaker where people come together and community formation is established. This helps to create interaction between citizens.

Figure 164: Public space related to building

Typology 3: Semi-private space
In the third typology, the building is transformed to create a semi-private space. This space is not separated from the public space, but the fact that the place is surrounded by the building creates a sense of enclosure. This allows the users of the building to experience a feeling of belonging and to be creative in how they want to use the space. At the same time, there is also a connection between the street and public life. This also creates connections between other users of the city and provides community-building on a neighborhood scale.

Figure 165: Semi-private space

Typology 4: Enclosed semi-private space
The fourth typology also creates semi-private space, but with even more enclosure. This place therefore also contributes to identity and creativity. Yet, in this variant, there is less connection with the street and other users of the area. In theory, these citizens can visit the place, but in practice, it is not inviting. Therefore, the typology should be applied mainly when a place of togetherness and creativity is admirable, but privacy must also be protected.

Figure 166: Enclosed semi-private space

Typology 5: Private space
In the last typology, a completely private space is created. Only users of the building are allowed in this space. This helps to create a relationship between these users, but does not contribute much at the neighborhood level. It could be said that this typology can be used mainly for creating small-scale connections and privacy.

Figure 167: Private space

6.8 Building Forms
Development of typologies

Conclusion

There are several ways building blocks can be transformed. The table below shows how each typology does or does not contribute to the creation of a Just City environment.

It can be seen that the different typologies contribute to the Just City concept in different ways. Here, the typology of semi-private space contributes the most because it creates connections not only between the users of the specific building but also with other city residents. It gives users space to be creative and belong, but also creates a relationship with the rest of the community.

Element of Urban Form	Design Principle	Typology 1: Public space	Typology 2: Public space with relation building	Typology 3: Semi-private space	Typology 4: Enclosed semi-private space	Typology 5: Private space
Continuity & Legibility	Develop routing of accidentally meeting	0	1	1	0	0
	Develop coherence in routing and orientation	1	0	0	0	0
	Create landmarks for orientation & do placemaking	0	1	1	0	0
Character	Develop places of belonging	0	1	2	1	1
	Develop places of inspiration & creativity	0	0	2	2	2
	Develop places of spontaneity	0	1	2	1	1
	Create coherence between citizens	0	1	2	1	1
	Develop places of identity	0	0	2	1	1
Enclosure	Develop safe places	1	0	1	1	1
	Create coherence and work on community-building	0	1	2	1	1
	Develop social safety	0	1	2	1	1
	Create privacy for citizens & other users	-1	-1	0	1	2
	Protect the human scale in the design	0	1	2	2	2
	Find a right balance between public, semi-public & private space	-1	0	1	1	1
Activity & Use	Facilitate community-building and urban participation	0	1	2	1	1
	Develop places of spontaneous use and interaction	0	1	2	1	0
	Develop unprogrammed places	1	0	0	0	0
	Allow users to participate in the development of places	0	0	2	1	1
Quality of Public Realm	Develop places of character but with attention to own interpretation	0	1	2	2	1
	Develop accessible and connecting places, with special attention to slow traffic and public transport	1	0	0	0	0
Mixture (Diversity)	Develop an environment that creates tolerance and coherence	0	1	2	1	1
Movement	Develop walkable and bikeable areas	1	0	0	0	0
	Develop continuous landscapes without barriers	1	0	0	0	0
	Create safe movement	1	0	0	0	0
	Create movement flows that stimulate interaction and meeting	0	1	1	0	0
(Climate) Adaptation	Develop efficient building and transport	2	2	2	2	2
	Re-use buildings and building materials	2	2	2	2	2
Development Process	Give public actors bigger powers than private actors	1	1	0	0	0
	Allow everyone to benefit from public investments	1	1	0	0	0
	Scoring	11	18	35	23	22

Table 32: Assessment typologies for building transformations, using the Just City Framework

6.8 Building Forms
Development of typologies

Building approach

In the Building Forms theme, typologies can be developed that explore different forms of (re)development. For example, a choice can be made for repurposing. In this case, a new function is created in an existing building. Renovating means upgrading a building for an existing function. Transforming means changing the structure of a building for a new function. Finally, there is the typology of demolishing and rebuilding in which the existing building is demolished and a new building with a new function is established.

These typologies are described below and their contribution or disadvantage to a Just City environment is explained.

Repurposing

Renovating

Transforming

Demolish & Rebuild

Figure 168: Typologies for building approach

Typology 1: Repurposing

The first typology is that of repurposing. In this typology, a new function is chosen for an existing building. This contributes to the creation of a Just City environment because of the efficient use of materials. Also, being able to place a new function in an existing building contributes to temporary development and "soft" planning because it does not involve high investments. Finally, the existing identity of an area can be preserved in new development, contributing to its character. A disadvantage is that the existing structure often offers few opportunities. An office building can often only be used by a new company and cannot become housing within the same structure. Therefore, it is difficult to apply this typology if mixed-use or a completely different function is envisioned. Also, the building is not being changed. Thus, the opportunity for making it more sustainable is not taken advantage of.

Figure 169: Repurposing

Figure 170: Renovating

Figure 171: Transforming

Figure 172: Demolishing & rebuilding

Typology 2: Renovating

In the second typology, renovating, the function of a building remains the same, but the building is upgraded. This creates opportunities for creating a Just City. It enables the creation of better working and living conditions and makes buildings more sustainable. But because it does not enable a new function, it does not contribute much to the goals of temporary development and mixed-use development.

Typology 3: Transforming

In the third typology, the building is being transformed to make it suitable for a different function. This creates many opportunities for a development, as it allows for renovation and more sustainable development, and enables a new function. In this typology, for instance, an office building can easily be transformed into housing. A disadvantage is that transformation is often associated with high costs. This creates a dependency on developers and gives them power. It also creates long-term plans that do not allow for flexibility and temporary development.

Typology 4: Demolishing & rebuilding

In the last typology, demolishing and rebuilding, a strategy of new development is being chosen. This brings opportunities for many aspects of the Just City, namely mixed-use development and attracting a diverse population to an area. Also, it allows for a sustainable new development. Even though these are good aspects, this typology disadvantages the goals of making efficient use of materials and creating a fair distribution of resources. Also, it neglects the existing charter of an area.

Conclusion

The table below illustrates the scores of the different typologies. It shows that the scores are not far apart, except for the fourth typology (Demolishing & Rebuilding). While this typology offers opportunities for mixed-use development and attracting new populations, it is not sustainable and does not give nature a voice in the development process.

The other typologies contribute differently to creating a Just City environment. While the first typology contributes much to an efficient use of existing buildings and temporary development, the second and third typologies contribute more to creating better living and working conditions and making buildings more sustainable in the long run. There are also differences between the second and third typologies. The third typology allows for more mixed-use development but is also associated with higher costs, creating a dependency on private actors.

A policymaker or designer could use the table below to see which typology contributes to which values. Depending on the priorities of a particular development, the planner could make his or her decision.

Element of Urban Form	Design Principle	Typology 1: Repurposing	Typology 2: Renovating	Typology 3: Transforming	Typology 4: Demolishing & Rebuilding
Continuity & Legibility	Develop coherence in architecture and building style	1	1	1	0
Character	Develop places of belonging	1	1	1	0
	Pay attention to 'soft' planning and temporary urbanism	1	1	0	0
	Develop places of identity	1	1	1	0
Enclosure	Create coherence and work on community-building	1	1	1	0
	Protect the human scale in the design	1	1	1	0
Activity & Use	Develop places that serve and stimulate different uses	0	0	1	1
	Develop mixed-use and protect the development of diverse housing & functions	0	0	2	2
	Allow users to participate in the development of places	0	0	1	2
	Do temporary development that allows space to adjust to changes in uses	1	1	0	0
Quality of Public Realm	Develop places of character but with attention to own interpretation	1	1	1	0
	Develop sustainable and healthy places	0	1	1	1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	0	0	1	2
	Create social & spatial adaptability by doing temporary development	1	1	0	0
	Attract different population groups to the area	0	0	1	2
	Create a fair distribution of resources	1	1	1	1
	Leave space for small-scale initiatives during the development process	1	1	0	0
(Climate) Adaptation	Develop sustainably and climate adaptive	0	2	2	2
	Develop nature-based	0	2	2	2
	Develop efficient building and transport	2	2	1	-2
	Re-use buildings and building materials	2	2	1	-2
	Develop sustainable and comfortable buildings that create good living and working conditions	0	2	2	2
	Give a voice to nature in the decision-making process	2	2	2	0
Development Process	Allow bottom-up development	1	1	0	1
	Pay attention to temporary urbanism	1	1	0	0
	Give public actors bigger powers than private actors	0	0	-2	0
	Scoring	19	26	22	14

Table 33: Assessment typologies for building approach, using the Just City Framework

6.9 Building Forms
Design Typologies Assessment Model

Conclusion
The subchapter Building Forms dealt with the morphology of city forms and buildings in particular. It looked at the form of larger areas, typologies in which buildings can be transformed and different types of development. The typologies were assessed using the Just City Framework as an assessment model and a score was derived from this.

In table 34, the different typologies are shown and an overview of their score is given. The table also shows exactly how each typology contributes or does not contribute to the creation of a Just City. This provides insight into the reasons for choosing or not choosing a particular typology and learns what exactly is the influence of each typology in creating a Just City environment.

Figure 173: Design theme Building Forms

Typology	Score	Effect
	13	+ Contributes to good orientation and wayfinding + Long sightlines create connection and spontaneous interactions - Threat of little enclosure - Many crossings disadvantages walkability
	23	+ Contributes to enclosure and community-building on a small scale + Stimulation of spontaneous interaction by bringing roads organically together - Wayfinding and orientation is harder than in previous example
	36	+ Combination of enclosed streets (round streets) and linear streets with long sightlines + Creation of a strong urban core + Natural hierarchy of streets and therefore use of streets - Safety should be protected on the intersections
	19	+ Different subareas creates community-building + Movements come together at sections of areas - Community-building threatened on the bigger scale
	11	+ Creation of extra public space + Direct relation between building and public space - No (semi-)private space or other place of expression
	18	+ Public space as placemaker + Direct relation between building and public space + Place were people come together and that serves community-building - No private space of privacy
	35	+ Semi-private space that creates connection with the bigger + Feeling of enclosure + Feeling of belonging and creativity - No private space of privacy
	23	+ Semi-private enclosed space that serves community-building on a small scale + Feeling of enclosure + Feeling of belonging and creativity + Place with privacy - Little connection with the street
	22	+ Place of belonging + Place of creativity and self-expression + Place with privacy - No connection with the street
	19	+ Efficient and sustainable use of buildings + Existing identity of an area can remain + Not expensive - Existing structure limits opportunities - No upgrade in sustainability and living/working conditions
	26	+ Efficient and sustainable use of buildings + Existing identity of an area can remain + Renovation creates opportunities to improve sustainability - Existing structure limits opportunities - Expensive intervention
	22	+ Efficient and sustainable use of buildings + Existing identity of an area can remain + Renewed structure creates opportunities for new uses + Renewed structure creates opportunities to improve sustainability - Expensive intervention
	14	+ New building creates opportunities for new uses + New building creates opportunities to improve sustainability - Inefficient use of buildings and materials - Existing identity of an area gets lost - Expensive intervention

Table 34: Overview of typologies of the design theme Building Forms and their contribution to a Just City

6.9 Building Forms
Design Typologies Assessment Model

The table to the right summarizes what can be learned from the assessment of different typologies for the design theme of Building Forms. It constitutes an exact overview of how each typology does or does not contribute to the specific Elements of Urban Form from the Just City Framework. Even though this overview consists of some personal assumptions, it gives a good insight into why certain interventions were chosen. It shows the end result of Step 4 of the 5-Step Methodology.

	Continuity & Legibility	Character	Enclosure	Activity & Use	Quality of Public Realm	Mixture (Diversity)	Movement	(Climate) Adaptation	Development Process	
Orthogonal										13
Organic										23
Radial										36
Patchwork										19
Public space										11
Public space related to building										18
Semi-private space										35
Enclosed semi-private space										23
Private space										22
Repurposing										19
Renovating										26
Transforming										22
Demolish & Rebuilding										14

Scoring Legend

- ● -4 or less
- ● -2 or -3
- · -1
-   0
- · 1
- ● 2 or 3
- ● 4 or more

Figure 174: Design Typologies Assessment Model for the design theme Building Forms

6.10 Design Typologies Assessment Model

This chapter presented the 4 spatially oriented design themes and how the 5-Step Methodology can be applied to them. Steps 1 to 4 of the methodology were applied to each theme and as a result, an Assessment Model was derived for each theme.

An overview of the Assessment Models of all themes combined is on the following pages. These models provide useful information for any urban planner, designer or other stakeholders. It provides an overview of how each typology does or does not contribute to the creation of a Just City environment. It helps to choose how certain solutions can be combined with each other in order to create a Just City. Although the model can be extended endlessly, it provides information for any designer in the preliminary stages of urban (re)development. Pages 186 and 187 elaborate on how the Assessment Models can be used in practice, based on a practical experiment in Appendix A.3.

Use of the model

Although the main purpose of this chapter was to show how the 5-Step Methodology works, the Design Typologies Assessment Model can also be seen as one of the research outcomes of this thesis. Indeed, the model provides useful information for any urbanist and therefore contributes to scientific knowledge on how to plan a Just City. The model is adaptable for any context-specific development and provides a tangible model, which urbanists can work with.

Translating the model into a design

The Design Typologies Assessment Model is the first step towards the creation of a design. In step 5 of the methodology, different typologies may be combined and integrated into a design. Again, the method of scoring can be applied here. Figure 176 shows how this could work. It combines 4 typologies and adding up the scores creates a final score of the design. This final score shows how the design contributes to creating a Just City environment. However, Appendix A.3 shows that in practice, the integration phase is not as simple as it seems. Therefore, when the 5-Step Methodology is applied in practice, it is important that all stakeholders are involved in step 5 and a democratic integration of the different typologies is achieved.

Impressions

The impressions on pages 182 to 185 provide examples of how step 5 of the 5-Step Methodology can be implemented. It combines high-scoring typologies from the Design Typologies Assessment Models and shows how these typologies can be integrated. The impressions show what quality can be created by integrating the typologies. Again, it is important to emphasize that the integration phase is more complex in practice. The impressions mainly function as illustration of how the integration phase *could* take place.

Figure 175: Example of scoring in step 5 of the 5-Step Methodology

Design Typologies Assessment Model
Mobility & Connectivity

Columns: Continuity & Legibility | Character | Enclosure | Activity & Use | Quality of Public Realm | Mixture (Diversity) | Movement | (Climate) Adaptation | Development Process

Typology	Score
No Hierarchy	-16
Main roads around the area	27
Main roads through the area	31
Shared street	43
Pedestrian street	48
Bike-oriented street	35
Car-oriented street	-6
Public transport-oriented street	40
Hiding	38
Accepting	-19
Embedding	10
Rerouting & Combining	8

Scoring Legend

- -4 or less
- -2 or -3
- -1
- 0
- 1
- 2 or 3
- 4 or more

Design Typologies Assessment Model
Functional Configuration

Columns: Continuity & Legibility | Character | Enclosure | Activity & Use | Quality of Public Realm | Mixture (Diversity) | Movement | (Climate) Adaptation | Development Process

Typology	Score
Monofunctional Development	-42
Equal Mixing	11
Monofunctional blocks with differentiation	18
Mixing with loading characteristic	34
Mixed-use clusters	48
No mixing	-13
Vertical mixing	31
Horizontal mixing	28
Random mixing	31
Temporary development in fixed buildings	45
Temporary development in temporary buildings	44

Design Typologies Assessment Model
Public Space Development

Columns: Continuity & Legibility | Character | Enclosure | Activity & Use | Quality of Public Realm | Mixture (Diversity) | Movement | (Climate) Adaptation | Development Process

Rows and scores:
- No hierarchy — -10
- One central public space — 11
- Network of public spaces without hierarchy — 15
- Network of public spaces with hierarchy — 44
- Linear Public Space — 40
- Public space around infrastructural node — 40
- Nature-based public space — 37
- Public space around functions — 36
- Community-based public space — 33
- Formal planning — 37
- Flexible planning — 38

Scoring Legend
- -4 or less
- -2 or -3
- -1
- 0
- 1
- 2 or 3
- 4 or more

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Design Typologies Assessment Model
Building Forms

Columns: Continuity & Legibility | Character | Enclosure | Activity & Use | Quality of Public Realm | Mixture (Diversity) | Movement | (Climate) Adaptation | Development Process

Rows and scores:
- Orthogonal — 13
- Organic — 23
- Radial — 36
- Patchwork — 19
- Public space — 11
- Public space related to building — 18
- Semi-private space — 35
- Enclosed semi-private space — 23
- Private space — 22
- Repurposing — 19
- Renovating — 26
- Transforming — 22
- Demolish & Rebuilding — 14

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6.11 Impressions
Impression 1

This page provides an impression that shows how different typologies from the Design Typologies Assessment Models can come together in an urban design. Figure 176 illustrates which typologies these are and what their scores are. The typologies all land in the design of the impression, and this provides an example of how Step 5 of the 5-Step Methodology can be implemented.

The impression shows an unprogrammed public space adjacent to a mixed-use building. The public space is free to use and spontaneous interactions take place. The image also shows a radial morphology. The radials are filled in with the street typology "public transit-oriented streets" and the circular streets are "shared streets." This creates a lively place, due to public transportation, but also an enclosed place that provides community building. Finally, a strategy of flexible design has been applied in the public space, allowing spontaneous interactions to take place.

Although the impression is not context-specific and therefore abstract, it gives an idea of how the different design typologies from the Assessment Models can be integrated and how step 5 could be approached.

Figure 176 Scoring of design of Impression 1

Figure 177: Impression 1

6.11 Impressions
Impression 2

The impression on this page also illustrates how step 5 of the 5-Step Methodology could be approached. The illustration shows a bicycle-oriented street that creates access for slow traffic and routes to urban cores. This core is illustrated in the building on the right, where vertical mixing has been applied and placemaking has taken place. Furthermore, the illustration shows several public spaces. It shows an enclosed public space, used primarily for community-building on a small scale, as well as public spaces that function as placemakers and serve for participation and connection on a larger scale. Finally, two typologies of building transformations are shown. The building on the left creates semi-private space, while the building on the left provides public space.

The exact typologies that land in the impression are shown in figure 178. It gives an impression of their score and provides an example of how a final score for the design can be generated.

Figure 178: Scoring of design of impression 2

Figure 179: Impression 2

Semi-private space

Bike-oriented street

Public space adjacent to building

Building vertical mixing

6.12 Applying the 5-Step Methodology in practice

This chapter provided examples of how the 5-Step Methodology works and resulted in a Design Typology Assessment Model for basic typologies. This illustrated how the methodology works and can be applied in theory. Nevertheless, it is also useful to investigate how the methodology can be applied in practice. Therefore, additional research is conducted in Appendix A.3. This research focuses on how the methodology can be applied in the field and how the basic typologies of pages 178 to 181 can be implied. The research focuses on a new development area in Amsterdam, namely the Sloterdijk Station Area. Questions asked in this research are:

1. What steps should be taken before applying the 5-Step Methodology in practice?
2. How should the 5 steps be adapted to use them in practice?
3. How can the basic typologies from the Design Typologies Assessment Model be used in practice?

The main conclusions of this study are reviewed below.

Preparatory steps
The appendix chapter first explains the preparatory steps that must be taken before applying the 5-Step Methodology. The purpose of these steps is mainly to adapt the Just City Framework to include context-specific conditions and the requirements of local stakeholders. To this end, two steps must be taken, namely:

1. Do analyses
To apply the Just City Framework to context-specific conditions, it is important to analyze the location and understand its strengths and challenges. To do this, it is important to conduct extensive analyses for the location. This includes spatial analyses, as well as stakeholder and process analyses. This step is necessary to establish new planning and design principles for the site and incorporate them into the Just City Framework.

2. Adjust the Just City Framework
The second step that must be taken before putting the 5-Step Methodology into practice is adapting the Just City Framework. The conclusions of the analyses in preparatory step 1 must be translated into planning and design principles and adopted into the Just City Framework. This creates a new and context-specific framework that can be used in the 5-Step Methodology. This makes the assessment and thus the creation of the design stronger.

Figure 180 shows the preparatory phase and the steps to be taken in it.

Making use of the Design Typologies Assessment Models
The study in Appendix A.3 demonstrates how the basic typologies of pages 178 to 181 can be used in practice. 4 scenarios become evident. They show different uses of the Design Typologies Assessment Models and examples are given of how the basic typologies can be used. The 4 scenarios are explained below.

1. The basic typologies are directly applicable
An example is provided in the appendix where the basic typologies could be applied directly to the site. Although in reality, the assessment differs slightly from the Design Typologies Assessment Model, the scoring of the basic typologies give a good estimation of the added quality in the area.

2. The basic typologies are being combined
For other design choices in the Sloterdijk Station Area, the basic typologies could be combined. Here, typologies concerning Mobility & Connectivity are combined with typologies concerning the theme Public Space Development. Although the assessment differs greatly from the assessment of the basic typologies, the assessment of the basic typologies could be used as an indicator of added quality in the area.

3. Creation of new typologies, but information can be extracted from the basic typologies
In the third example, new context-specific typologies are developed for the Sloterdijk Station area. It becomes apparent that even though these are new typologies, the information from the basic typologies could be used to create an idea of how the different typologies do or do not contribute to creating a Just City. This shows that the basic typologies are still valuable, even if new typologies need to be developed.

4. Creation of new typologies
Finally, there is also a scenario in which the basic typologies are not useful. New typologies have to be developed to explore the best solutions. This scenario demonstrates that it is always important to investigate new typologies.

To better understand the 4 scenarios above, it is recommended to consult Appendix A.3. Here it is explained in detail how the basic typologies from pages 178 to 181 can be applied in practice and how they sometimes need to be modified to become applicable. Thus, it can be understood how steps 1 to 4 may be implemented in practice.

Step 5: Integration
Finally, the appendix chapter provides insight into how step 5 of the 5-Step Methodology behaves in practice. It reveals that this step is not as simple as it seems because the assessment of different typologies depends on certain other design choices. The experiment shows the interrelationships between different typologies and this makes the integration phase more complex. Therefore, it is concluded that in this phase, it is important to keep discussing different combinations of typologies with the involvement of all stakeholders. To achieve a good integration, it is important that this step is done in a democratic way and that the users are central. This conclusion is incorporated in figure 180. Furthermore, a conclusion of the experiment in the appendix is that it is important to deepen the application of step 5 in further research.

Conclusion
While this chapter has provided insight into the functioning of the Just City Framework and the 5-Step Methodology, it is still from a theoretical point of view. Therefore, it is important to obtain information on how the created methodology behaves in practice and this has been done in the research of Appendix A.3. Here, a deeper understanding was created of the preparatory steps, how the basic typologies from pages 178 to 181 can be applied in practice and the current limitations of step 5. For a deeper understanding and further explanation of these conclusions, Appendix A.3 may be consulted.

Preperatory steps

0.1 Do analyses
Research the strength and weaknesses of the location and inventorize the needs and wishes of important stakeholders

0.2 Adjust the Just City Framework
Translate conclusions from context-specific analyses into planning & design principles and include them in the framework

5-step Methodology

1 Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2 Develop typologies for that design theme

Design Typologies

3 Assess the typologies with the Just City Framework as an assessment model

4 Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

Assessment model of suitable design solutions that contribute to the creation of a Just City

5 Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

Keep exploring opportunities in discussion with stakeholders Scorings as input for the discussion

Figure 180: Overview 5-Step Methodology in practice

6.13 Conclusion

The research question that this research aimed to answer is:

How can a new methodology result in concrete planning and design strategies that allow the Just City to revive?

To answer this question, this chapter took the Just City Framework and its four spatial design themes as its starting point. These design themes were Mobility & Connectivity, Functional Configuration, Public Space Development and Building Forms. By developing different typologies for different sub-themes, more insight was gained into how an urban area can develop spatially and by assessing these typologies using the Just City Framework as an assessment model, a result of this research was derived. This result consists of an exact scoring overview of typologies with an elaboration of how the typology does or does not contribute to the development of all the Elements of Urban Form from the Just City Framework. This resulted in the Design Typologies Assessment Model, one of the outcomes of this thesis research. Finally, Step 5 of the 5-Step Methodology was illustrated, by showing two impressions integrating design typologies from the Assessment Models. Although these impressions are not based on an existing situations, the examples provide an idea of how the different typologies from the Assessment Models can be integrated into a spatial design.

The chapter answers the research question in two ways. First, and most importantly, it shows how the 5-Step Methodology can be applied and how it works in theory. Furthermore, the chapter answers the research question by providing an overview of design solutions and creating basic design typologies that, with minor modifications, can be used in a variety of urban developments. The Design Typologies Assessment Model has offered insight into how basic typologies commonly found in urban developments, score on the values and principles of a Just City. This contributes to scientific knowledge about how to plan a Just City because it allows urban planners to understand why certain design choices do or do not contribute to spatial justice.

While the chapter has provided extensive knowledge about basic typologies commonly found in urban developments, this is done from a theoretical point of view. Therefore, it is useful to investigate how the 5-Step Methodology behaves in practice. To investigate this, an experiment has been set up in Appendix A.3. From this additional research, conclusions are drawn about how the 5 steps of the methodology should be modified to make them useful in the field and how the basic typologies from the Design Typologies Assessment Models serve development in practice. The main conclusions are that 2 preparatory steps need to be added before the 5-Step Methodology can be applied, that there are 4 scenarios of how the basic typologies can be applied and that step 5 of the methodology requires a democratic approach.

The following chapter applies the 5-Step Methodology to the design theme Development Process. Here, an example is given of how the methodology can serve for process design. This clarifies how the methodology is applicable not only for designing spatial configurations but also for process designs.

7. Strategizing a Just City

This chapter aims to show how the 5-Step Methodology, introduced in Chapter 5, works for the design theme Development Process and how it can result in a strategic design. This is the only design theme that focuses on the process behind urban development and is therefore explained separately from the other design themes. The chapter begins with an assessment of Zuidas' neoliberal development strategy, using the Just City Framework as an assessment model. It then develops typologies for the design theme Development Process and assesses them. Subsequently, an overview of development typologies with a score and precise information on how they contribute to creating a Just City environment, follows. With this overview in mind, the final step of the Methodology will be applied and an overall process

design will be developed, as example of how the 5-Step Methodology can lead to a tangible design. Finally, the conclusion will compare the new strategy with the assessment of the Zuidas development. Conclusions will be drawn about how a new strategy differs from the existing strategy and how a Just City process can be shaped.

The research question that will be answered in this chapter is:

How can a new methodology result in concrete planning and design strategies that allow the Just City to revive?

This chapter focuses hereby mainly on planing strategies. In the conclusion, an answer to this question will be given.

Photo 21: 'Nieuwe Leeuwarderweg' (Stadsarchief Amsterdam/ Dienst der Publieke Werken, Afdeling Stadsontwikkeling, 1969)

Assessing contemporary development processes

The upcoming chapter aims to show how the 5-Step Methodology can be applied to develop a new process design for urban development in Amsterdam. Here, the introduced methodology is applied to the design theme Development Process. In order to create this new strategy, it is important to evaluate the current development process and how it does or does not contribute to the creation of a Just City.

On page 98 it is explained how the Just City Framework is suitable not only for the assessment of new developments or developments already seen as inclusive and spatially just, but also for the assessment of already existing (neoliberal) developments. Therefore, an assessment can be made for the development process of the neoliberal example project Zuidas. This assessment may be used to see what problems exist now and can be compared to a new proposed strategy in the conclusion of this chapter.

The table on the page opposite assesses the Zuidas project and provides insight into how this development process contributes to the creation of a Just City. Chapter 4 explained the development strategy for Amsterdam Zuidas and this will be used as information on which the assessment is based. The chapter explained how the strategy was market-oriented and project-based. The government took a soft-steering role and left development mainly to private actors. This strategy is taken into account in the assessment.

The assessment results in a score of -33. The development was heavily based on attracting only a certain population group to the city and there was little focus on bottom-up development and strengthening the existing community. The project also eventually failed in limiting infrastructural barriers. However, there was attention to sustainability and the creation of car-free areas (Gemeente Amsterdam, 2016). Consequently, these are the only aspects on which the Zuidas development scored positively. In conclusion, the neoliberal strategy focused on a market-oriented and top-down approach does not result in a development that meets many of the needs of a Just City environment.

Following the 5-Step Methodology

The following pages show how the 5-Step Methodology works and propose a new strategy for urban development. From following the methodology, a process design is developed and the conclusion compares it to the existing situation, as explained above. Since the focus of this chapter is to show how the 5-Step Methodology can be translated into a process design, it is important to have a good understanding of which step is taken when. Therefore, the right corner of each page of the upcoming chapter illustrates which methodological step or steps the page is showing. This enables a clear understanding of what each step does and how it is addressed. Figure 181 shows the 5 steps of the Methodology.

5-step Methodology

1. Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2. Develop typologies for that design theme

Design Typologies

3. Assess the typologies with the Just City Framework as an assessment model

4. Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

Assessment model of suitable design solutions that contribute to the creation of a Just City

5. Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

Figure 181: 5-Step Methodology

Element of Urban Form	Just City Values	Planning or Design Principle	Scoring
Continuity & Legibility	Mobility Choice Acceptance Identity	Develop routing of accidentally meeting	-1
		Develop coherence in routing and orientation	1
		Develop coherence in architecture and building style	1
		Create landmarks for orientation	0
		Create (functional) cores and routes leading there	-1
		Limit (infrastructural) barriers in the area	-2
Character	Acceptance Aspiration Choice Identity	Develop places of belonging	-1
		Develop places of inspiration & creativity	0
		Develop places of spontaneity	0
		Create coherence between citizens	-1
		Pay attention to 'soft' planning and temporary urbanism	-2
		Develop places of identity	1
Enclosure	Acceptance Engagement Welfare	Develop safe places	1
		Create coherence and work on community-building	-2
		Develop social safety	0
		Create privacy for citizens & other users	0
		Protect the human scale in the design	-2
		Find a right balance between public, semi-public & private space	0
Activity & Use	Aspiration Choice Democracy Engagement Fairness Identity Rights	Develop places that serve and stimulate different uses	-1
		Develop cores where different uses come together	-1
		Facilitate community-building and urban participation	-2
		Develop mixed-use and protect the development of diverse housing & functions	-2
		Develop places of spontaneous use and interaction	1
		Develop unprogrammed places	1
		Allow users to participate in the development of places	-2
		Create access to necessities for all	-1
		Do temporary development that allows space to adjust to changes in uses	-2
		Allow a diverse economy to grow and create a diversity of jobs	-1
Quality of the Public Realm	Identity Mobility Resilience Welfare	Develop qualitative and healthy places, mentally & physically	1
		Develop places of character but with attention to own interpretation	-1
		Develop accessible and connecting places, with special attention to slow traffic	1
		Develop sustainable and healthy places	2
		Develop nature-based public places and create a right balance between building density and public space	1
Mixture (Diversity)	Acceptance Choice Engagement Fairness Power Rights	Develop mixed-use and diverse housing and functions	-2
		Create access to good housing for everyone	-2
		Create social & spatial adaptability by doing temporary development	-2
		Attract different population groups to the area	-2
		Create a fair distribution of resources	-1
		Develop an environment that creates tolerance and coherence	-1
		Leave space for small-scale initiatives during the development process	-2
		Develop regulations that promote fair housing and functions	0
		Create and stimulate job opportunities for all and economic progress	1
Movement	Choice Mobility Welfare	Develop walkable and bikeable areas	1
		Create connections that serve a bigger area	-1
		Create cores and routing towards them	-1
		Invest in public transport connections and demotivate car-use	1
		Develop continuous landscapes without barriers	-2
		Create safe movement	1
		Create movement flows that stimulate interaction and meeting	1
(Climate) Adaptation	Resilience Welfare	Develop sustainably and climate adaptive	2
		Develop nature-based	2
		Develop efficient building and transport	1
		Re-use buildings and building materials	-2
		Develop sustainable and comfortable buildings that create good living and working conditions	2
		Give a voice to nature in the decision-making process	2
Development Process	Acceptance Choice Democracy Engagement Fairness Power Rights Welfare	Allow bottom-up development	-2
		Place users centrally in the decision-making	-2
		Protect those without a voice during the development process	0
		Pay attention to temporary urbanism	-2
		Bring opportunities for citizens to protest and debate	-2
		Give public actors bigger powers than private actors	-2
		Allow everyone to benefit from public investments & develop cost-efficiently	-2
		Let private actors contribute to urban quality (with fixed contracts)	-2
		Create transparent and fair processes	
		Scoring	-33

Table 35: Assessment Zuidas development, using the Just City Framework

Development of typologies

The first step of the 5-Step Methodology is to choose a design theme that includes one, two or three of the Elements of Urban Form from the Just City Framework. In this chapter, the Development Process theme is chosen and the objectives and principles of this theme are listed in the table below. On pages 195 to 203, typologies are developed and steps 2 and 3 of the Methodology are followed. The typologies are assessed and their impact on creating a Just City is measured using the Just City Framework. This ultimately results in a summary of typologies with a score, which is the start of the integration phase. How this results in a process design, is explained afterwards.

The table below summarizes the objectives of the Element of Urban Form included in the design theme Development Process. The sub-themes of the Development Process for which a set of typologies is developed in the following pages are the planning approach, democratic involvement and the role of government in urban development.

① Pick a design theme that includes the development of 1, 2 or 3 Elements of Urban Form

Figure 182: Design theme Development Process

Element of Urban Form	Just City Values	Planning & Design Principles
Development Process	Acceptance Choice Democracy Engagement Fairness Power Rights Welfare	Allow bottom-up development
		Place users centrally in the decision-making
		Pay attention to temporary urbanism
		Bring opportunities for citizens to protest and debate
		Give public actors bigger powers than private actors
		Allow everyone to benefit from public investments
		Let private actors contribute to urban quality with fixed contracts
		Create transparent and fair processes

Table 36: Element of Urban Form, included in the design theme Development Process

② Develop typologies for that design theme

③ Assess the typologies, using the Just City Framework

Planning approach

There are several planning approaches to an urban development process. The main approaches are opposites of each other, namely integrated urban development and organic development. Integrated urban development emphasizes big-scale design and the creation of a definite end result. Organic development focuses more on the process than the end result and has a small-scale approach. (Pbl, 2012)

These different planning approaches are explained below and their effect and contribution to a Just City is assessed.

Figures 183 & 184: Illustrations of integrated development approach & organic development approach (Based on Pbl, 2012)

Typology 1: Integrated urban development

Integrated urban development focuses on making long-term plans and an integrated strategy for future development. In this form, the plans are set and focus on a large scale. The final vision is clearly stated and the plan concentrates on taking functional steps toward that final vision. The development is done by large parties and the government takes a leading role. All steps are taken one after the other and follow each other logically (Pbl, 2012).

This type of development is useful for big-scale and expensive interventions. Examples include infrastructural developments or achieving sustainability goals. This requires long-term and fixed plans. The table to the right shows the possibilities of this planning approach to the goals and principles of a Just City.

Figure 185: Illustrations of integrated development approach (Based on Pbl, 2012)

Element of Urban Form	Design Principle	Typology 1
Continuity & Legibility	Create (functional) cores and routes leading there	2
	Limit (infrastructural) barriers in the area	2
Character	Pay attention to 'soft' planning and temporary urbanism	1
	Develop places that serve and stimulate different uses	1
	Develop cores where different uses come together	2
	Facilitate community-building and urban participation	1
Activity & Use	Develop mixed-use and protect the development of diverse housing & functions	2
	Develop unprogrammed places	1
	Create access to necessities for all	2
	Do temporary development that allows space to adjust to changes in uses	0
	Allow a diverse economy to grow and create a diversity of jobs	2
	Develop accessible and connecting places, with special attention to slow traffic	2
Quality of Public Realm	Develop sustainable and healthy places	2
	Develop nature-based public places and create a right balance between building density and public space	1
	Develop mixed-use and diverse housing and functions	2
	Create social & spatial adaptability by doing temporary development	1
	Attract different population groups to the area	2
Mixture (Diversity)	Create a fair distribution of resources	1
	Leave space for small-scale initiatives during the development process	0
	Develop regulations that promote fair housing and functions	2
	Create and stimulate job opportunities for all and economic progress	2
	Create connections that serve a bigger area	2
Movement	Create cores and routing towards them	2
	Invest in public transport connections and demotivate car-use	2
	Develop continuous landscapes without barriers	2
	Develop sustainably and climate adaptive	2
(Climate) Adaptation	Develop nature-based	2
	Re-use buildings and building materials	2
	Give a voice to nature in the decision-making process	2
	Allow bottom-up development	0
	Place users centrally in the decision-making	1
Development Process	Pay attention to temporary urbanism	0
	Bring opportunities for citizens to protest and debate	1
	Allow everyone to benefit from public investments and	2
	Let private actors contribute to urban quality (with fixed contracts)	
Scoring		**53**

Table 37: Assessment integrated development approach, using the Just City Framework

7.2 The Development Process
Development of typologies

Typology 2: Organic urban development

Organic urban development focuses on a gradual design approach, paying more attention to the process than the end result. This approach focuses more on small-scale interventions and the municipality assumes a facilitating role. Small actors are given a strong voice in the process and steps are taken simultaneously and randomly rather than in a strong order. (Pbl, 2012)

Organic urban development takes into account economic changes and leaves room for changing demands. This is beneficial for a Just City because it can adapt to changing conditions and the needs of citizens. It can be beneficial for goals such as "mixed-use development" and "temporary development". The table to the right assesses the potential of this planning approach for the goals of a Just City.

Element of Urban Form	Design Principle	Typo-logy 2
Continuity & Legibility	Create (functional) cores and routes leading there	1
	Limit (infrastructural) barriers in the area	1
Character	Pay attention to 'soft' planning and temporary urbanism	2
Activity & Use	Develop places that serve and stimulate different uses	1
	Develop cores where different uses come together	1
	Facilitate community-building and urban participation	1
	Develop mixed-use and protect the development of diverse housing & functions	2
	Develop unprogrammed places	2
	Create access to necessities for all	2
	Do temporary development that allows space to adjust to changes in uses	2
	Allow a diverse economy to grow and create a diversity of jobs	1
Quality of Public Realm	Develop accessible and connecting places, with special attention to slow traffic	1
	Develop sustainable and healthy places	2
	Develop nature-based public places and create a right balance between building density and public space	1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	2
	Create social & spatial adaptability by doing temporary development	2
	Attract different population groups to the area	2
	Create a fair distribution of resources	1
	Leave space for small-scale initiatives during the development process	2
	Develop regulations that promote fair housing and functions	1
	Create and stimulate job opportunities for all and economic progress	1
Movement	Create connections that serve a bigger area	1
	Create cores and routing towards them	1
	Invest in public transport connections and demotivate car-use	1
	Develop continuous landscapes without barriers	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1
	Develop nature-based	2
	Re-use buildings and building materials	2
	Give a voice to nature in the decision-making process	2
Development Process	Allow bottom-up development	2
	Place users centrally in the decision-making	2
	Pay attention to temporary urbanism	2
	Bring opportunities for citizens to protest and debate	2
	Allow everyone to benefit from public investments	2
	Let private actors contribute to urban quality with fixed contracts	
	Scoring	**53**

Table 38: Assessment organic development approach, using the Just City Framework

Figure 186: Illustrations of organic development approach (Based on Pbl, 2012)

Conclusion

The various planning approaches offer different possibilities for creating a Just City. The integrated approach contributes to a planning design in which major interventions can be made. These may include interventions in infrastructure or green structures. The organic development approach also contributes to the creation of a Just City, but in a different way. This approach creates room for adaptable plans for changing needs of citizens.

Since both approaches score high in the assessment, it can be concluded that a combination of the approaches would be best for future urban development. In this approach, large interventions and future objectives, such as sustainability goals, will be developed in an integrated manner, while small-scale interventions will be developed organically. This approach combines the best of both approaches and therefore contributes optimally to the creation of a Just City.

Figure 187: Conclusion: a mix of development approaches is desirable

Democratic engagement

The second topic for which typologies are developed is democratic involvement. The theme Development Process shows the importance of putting the user at the center of decision-making and democratic involvement in the process. There are different typologies and for democratic involvement, such as information provision, surveying and opinion gathering, discussion and experimentation and lastly direct democracy. These typologies will be examined below and their effect on the goals of a Just City will be assessed.

Figure 188: Democratic engagement typologies

Typology 1: Information provision

The first form of democratic participation, informational participation, involves citizens passively in the development process. They receive information and gain insight into the transparent process, but their opinions are not actively considered. The table below shows how this form of democratic involvement affects the objectives for a Just City.

Figure 189: Information provision

Element of Urban Form	Design Principle	Typo-logy 1
Character	Pay attention to 'soft' planning and temporary urbanism	0
Activity & Use	Allow users to participate in the development of places	0
	Do temporary development that allows space to adjust to changes in uses	0
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	0
	Create social & spatial adaptability by doing temporary development	0
	Attract different population groups to the area	0
	Create a fair distribution of resources	0
	Leave space for small-scale initiatives during the development process	0
	Create and stimulate job opportunities for all and economic progress	0
(Climate) Adaptation	Develop sustainably and climate adaptive	0
	Give a voice to nature in the decision-making process	0
Development Process	Allow bottom-up development	0
	Place users centrally in the decision-making	1
	Pay attention to temporary urbanism	0
	Bring opportunities for citizens to protest and debate	1
	Give public actors bigger powers than private actors	0
	Allow everyone to benefit from public investments	0
	Let private actors contribute to urban quality with fixed contracts	0
	Create transparent and fair processes	2
	Scoring	**4**

Table 39: Assessment democratic engagement via information provision, using the Just City Framework

7.2 The Development Process
Development of typologies

Typology 2: Surveying

Surveying is a form of democratic engagement in which citizens' wishes are explored and inventoried. This allows planners to involve citizens' needs in the planning process and translate them into concrete plans.

This form can be labeled as more democratic than the first typology. However, it is still a passive form of involving citizens in the process. Their needs are identified, but they are not guaranteed to be translated into reality. Also, this form of participation does not enable actors to reach a consensus. It does not stimulate a discussion in which priorities are developed and multiple points of view are explored. It is merely an inventory of existing views. The table to the right shows the impact of this form on the goals of a Just City.

Figure 190: Surveys

Element of Urban Form	Design Principle	Typo-logy 2
Character	Pay attention to 'soft' planning and temporary urbanism	1
Activity & Use	Allow users to participate in the development of places	1
	Do temporary development that allows space to adjust to changes in uses	1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	1
	Create social & spatial adaptability by doing temporary development	1
	Attract different population groups to the area	1
	Create a fair distribution of resources	1
	Leave space for small-scale initiatives during the development process	0
	Create and stimulate job opportunities for all and economic progress	1
(Climate) Adaptation	Develop sustainably and climate adaptive	0
	Give a voice to nature in the decision-making process	0
Development Process	Allow bottom-up development	1
	Place users centrally in the decision-making	1
	Pay attention to temporary urbanism	1
	Bring opportunities for citizens to protest and debate	1
	Give public actors bigger powers than private actors	1
	Allow everyone to benefit from public investments	1
	Let private actors contribute to urban quality with fixed contracts	0
	Create transparent and fair processes	2
	Scoring	16

Table 40: Assessment democratic engagement via surveys, using the Just City Framework

Typology 3: Discussions and experiments

The third typology of democratic engagement is discussion and experimentation. By involving citizens and users in discussion, plans can form and different viewpoints and interests can be explored. Discussion allows actors to better understand the complexity and come closer together. Discussions enable actors to develop plans together in which all needs come together.

The table to the right shows how this form of democratic engagement affects the goals of a Just City.

Figure 191: Discussing & experimenting

Element of Urban Form	Design Principle	Typo-logy 3
Character	Pay attention to 'soft' planning and temporary urbanism	2
Activity & Use	Allow users to participate in the development of places	2
	Do temporary development that allows space to adjust to changes in uses	2
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	2
	Create social & spatial adaptability by doing temporary development	2
	Attract different population groups to the area	2
	Create a fair distribution of resources	2
	Leave space for small-scale initiatives during the development process	2
	Create and stimulate job opportunities for all and economic progress	2
(Climate) Adaptation	Develop sustainably and climate adaptive	2
	Give a voice to nature in the decision-making process	2
Development Process	Allow bottom-up development	2
	Place users centrally in the decision-making	2
	Pay attention to temporary urbanism	2
	Bring opportunities for citizens to protest and debate	2
	Give public actors bigger powers than private actors	2
	Allow everyone to benefit from public investments	2
	Let private actors contribute to urban quality with fixed contracts	1
	Create transparent and fair processes	2
	Scoring	37

Table 41: Assessment democratic engagement via discussing and experimenting, using the Just City Framework

7.2 The Development Process
Development of typologies

Typology 4: Direct democracy

The final form of democratic engagement is direct democracy. This tool gives citizens direct and binding power in the decision-making process and allows for the creation of binding plans that translate citizens' needs into action. It empowers citizens directly, thus ensuring democratic decision-making. Examples of topics for which direct democracy can be applied are building densities, characters of public spaces, functions in the urban landscape and mobility interventions.

The table to the right shows how this form of democratic engagement contributes to the goals of a Just City.

Figure 192: Direct democracy

Element of Urban Form	Design Principle	Typology 4
Character	Pay attention to 'soft' planning and temporary urbanism	2
Activity & Use	Allow users to participate in the development of places	2
	Do temporary development that allows space to adjust to changes in uses	2
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	2
	Create social & spatial adaptability by doing temporary development	2
	Attract different population groups to the area	2
	Create a fair distribution of resources	2
	Leave space for small-scale initiatives during the development process	2
	Create and stimulate job opportunities for all and economic progress	2
(Climate) Adaptation	Develop sustainably and climate adaptive	2
	Give a voice to nature in the decision-making process	2
Development Process	Allow bottom-up development	2
	Place users centrally in the decision-making	2
	Pay attention to temporary urbanism	2
	Bring opportunities for citizens to protest and debate	2
	Give public actors bigger powers than private actors	2
	Allow everyone to benefit from public investments	2
	Let private actors contribute to urban quality with fixed contracts	1
	Create transparent and fair processes	2
	Scoring	37

Table 42: Assessment democratic engagement via direct democracy, using the Just City Framework

Conclusion

There are several ways in which democratic engagement can be established in an urban decision-making process. These typologies contribute in different ways to the creation of a Just City development process. Therefore, they can all be used simultaneously during a process and need not be mutually exclusive. Especially " discussing and experimenting" and "direct democracy" score high in the assessment of a Just City, but the other types also serve a function of transparency and identification of needs.

7.2 The Development Process
Development of typologies

Role of the government
There are different roles a government can take in an urban development process. The government can take a leadership role and be a "performing government," or it can take a more passive stance and act as a "rightful government." The municipality may also choose to adopt a cooperative or responsive attitude. These typologies are shown here and behave differently on a scale of hard and soft steering and a hierarchical or network approach. (Gemeente Weert, 2020)

The different typologies are explained in detail below. Examples are given of how it empowers certain actors. Here, the actors described on page 78 are taken as examples.

Figure 193: Typologies for the role of the government
(Based on Gemeente Weert, 2020)

Typology 1: Performing government
In the first typology of roles that a government can take, the government adopts a performing role. In this role, the government takes a leading and directing position and makes its own plans. The government engages in urban development and there is a hierarchy in which the municipality is at the top (Gemeente Weert, 2020).

Moreover, the illustration shows how this typology and the government's behavior affect the decision-making environment. The typology increases the power of the municipality. As the municipality wants to fulfill the needs of citizens and create a healthy environment, the power of users and activists also increases. On the other hand, the power of the private developer decreases. The table below shows that this typology contributes to many of the goals of a Just City, but there is also a risk that private developers will be less willing to invest and thus contribute to urban quality.

Performing Government

Figure 194: Performing government
(Based on Gemeente Weert, 2020)

Element of Urban Form	Planning or design principle	Typology 1
Continuity & Legibility	Limit (infrastructural) barriers in the area	1
Character	Pay attention to 'soft' planning and temporary urbanism	2
	Develop cores where different uses come together	2
	Facilitate community-building and urban participation	0
Activity & Use	Develop mixed-use and protect the development of diverse housing & functions	2
	Develop unprogrammed places	2
	Allow users to participate in the development of places	1
	Do temporary development that allows space to adjust to changes in uses	2
Quality of Public Realm	Develop accessible and connecting places, with special attention to slow traffic	2
	Develop sustainable and healthy places	0
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	2
	Create social & spatial adaptability by doing temporary development	1
	Attract different population groups to the area	2
	Create a fair distribution of resources	1
	Leave space for small-scale initiatives during the development process	2
	Develop regulations that promote fair housing and functions	2
(Climate) Adaptation	Develop sustainably and climate adaptive	2
	Develop nature-based	2
	Develop efficient building and transport	2
	Re-use buildings and building materials	2
	Give a voice to nature in the decision-making process	2
Development Process	Allow bottom-up development	1
	Place users centrally in the decision-making	2
	Pay attention to temporary urbanism	1
	Bring opportunities for citizens to protest and debate	1
	Give public actors bigger powers than private actors	2
	Allow everyone to benefit from public investments	2
	Let private actors contribute to urban quality with fixed contracts	2
	Create transparent and fair processes	1
	Scoring	**46**

Table 43: Assessment performing government, using the Just City Framework

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Typology 2: Rightful government
The second typology for the role of government is the "rightful government". In this typology, the government takes a role of little leadership, but the power structure is still based on hierarchy. The government sets rules for certain actors, increasing or decreasing their power. But in general, the government does not direct much (Gemeente Weert, 2020).

Figure 195 shows how this typology changes the decision-making process of urban development. It can be seen that it slightly increases the power of the municipality and decreases the power of private developers. But it mainly affects the background and conditions of the decision-making environment. How this form contributes to the creation of a Just City is assessed below.

Element of Urban Form	Planning or design principle	Typology 2
Continuity & Legibility	Limit (infrastructural) barriers in the area	0
Character	Pay attention to 'soft' planning and temporary urbanism	0
	Develop cores where different uses come together	0
	Facilitate community-building and urban participation	0
Activity & Use	Develop mixed-use and protect the development of diverse housing & functions	1
	Develop unprogrammed places	0
	Allow users to participate in the development of places	0
	Do temporary development that allows space to adjust to changes in uses	0
Quality of Public Realm	Develop accessible and connecting places, with special attention to slow traffic	0
	Develop sustainable and healthy places	1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	1
	Create social & spatial adaptability by doing temporary development	1
	Attract different population groups to the area	1
	Create a fair distribution of resources	1
	Leave space for small-scale initiatives during the development process	1
	Develop regulations that promote fair housing and functions	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1
	Develop nature-based	1
	Develop efficient building and transport	1
	Re-use buildings and building materials	1
	Give a voice to nature in the decision-making process	1
Development Process	Allow bottom-up development	0
	Place users centrally in the decision-making	0
	Pay attention to temporary urbanism	0
	Bring opportunities for citizens to protest and debate	0
	Give public actors bigger powers than private actors	1
	Allow everyone to benefit from public investments	1
	Let private actors contribute to urban quality with fixed contracts	1
	Create transparent and fair processes	0
	Scoring	**17**

Table 44: Assessment rightful government, using the Just City Framework

Typology 3: Cooperating government
The third typology of governance is having a cooperating government. In this form, the government takes a hard steering role and there is a network approach (Gemeente Weert, 2020). Moreover, the illustration shows how this affects the process. It shows that the power of all actors increases and relationships emerge between actors. On the other hand, all powers increase and this does not contribute to Just City's objectives of increasing the power of public actors and citizens. The table below shows how this form contributes to the creation of a Just City.

Element of Urban Form	Planning or design principle	Typology 3
Continuity & Legibility	Limit (infrastructural) barriers in the area	1
Character	Pay attention to 'soft' planning and temporary urbanism	1
	Develop cores where different uses come together	1
	Facilitate community-building and urban participation	1
Activity & Use	Develop mixed-use and protect the development of diverse housing & functions	1
	Develop unprogrammed places	1
	Allow users to participate in the development of places	1
	Do temporary development that allows space to adjust to changes in uses	1
Quality of Public Realm	Develop accessible and connecting places, with special attention to slow traffic	1
	Develop sustainable and healthy places	1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	1
	Create social & spatial adaptability by doing temporary development	1
	Attract different population groups to the area	1
	Create a fair distribution of resources	1
	Leave space for small-scale initiatives during the development process	1
	Develop regulations that promote fair housing and functions	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1
	Develop nature-based	1
	Develop efficient building and transport	1
	Re-use buildings and building materials	1
	Give a voice to nature in the decision-making process	2
Development Process	Allow bottom-up development	1
	Place users centrally in the decision-making	1
	Pay attention to temporary urbanism	1
	Bring opportunities for citizens to protest and debate	2
	Give public actors bigger powers than private actors	0
	Allow everyone to benefit from public investments	1
	Let private actors contribute to urban quality with fixed contracts	1
	Create transparent and fair processes	1
	Scoring	**30**

Table 45: Assessment cooperating government, using the Just City Framework

Rightful Government

Figure 195: Rightful government
(Based on Gemeente Weert, 2020)

Cooperating Government

Figure 196: Cooperating government
(Based on Gemeente Weert, 2020)

7.2 The Development Process
Development of typologies

Typology 4: Responsive government

In the fourth form of governance, the municipality behaves as a responsive government. This form focuses on facilitating social initiatives from a bottom-up approach (Gemeente Weert, 2020). Figure 197 shows the increase the power of citizens, activist groups and entrepreneurs and it contributes to Just City goals of allowing bottom-up initiative and putting the user at the center of the decision-making process. The table below illustrates the contribution of this governance principle to the creation of a Just City.

Responsive Government

Figure 197: Responsive government (Based on Gemeente Weert, 2020)

Element of Urban Form	Planning or design principle	Typology 4
Continuity & Legibility	Limit (infrastructural) barriers in the area	0
Character	Pay attention to 'soft' planning and temporary urbanism	2
Activity & Use	Develop cores where different uses come together	0
	Facilitate community building and urban participation	2
	Develop mixed-use and protect the development of diverse housing & functions	2
	Develop unprogrammed places	2
	Allow users to participate in the development of places	2
	Do temporary development that allows space to adjust to changes in uses	2
Quality of Public Realm	Develop accessible and connecting places, with special attention to slow traffic	0
	Develop sustainable and healthy places	1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	2
	Create social & spatial adaptability by doing temporary development	2
	Attract different population groups to the area	2
	Create a fair distribution of resources	2
	Leave space for small-scale initiatives during the development process	2
	Develop regulations that promote fair housing and functions	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1
	Develop nature-based	1
	Develop efficient building and transport	1
	Re-use buildings and building materials	1
	Give a voice to nature in the decision-making process	0
Development Process	Allow bottom-up development	2
	Place users centrally in the decision-making	2
	Pay attention to temporary urbanism	2
	Bring opportunities for citizens to protest and debate	2
	Give public actors bigger powers than private actors	1
	Allow everyone to benefit from public investments	0
	Let private actors contribute to urban quality with fixed contracts	2
	Create transparent and fair processes	2
	Scoring	**51**

Table 46: Assessment responsive government, using the Just City Framework

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7.2 The Development Process
Development of typologies

Conclusion

There are four typologies for the role a government can take in complex urban development. These typologies can be classified by placing them in a matrix of hard/soft control on one axis and hierarchical/network approach on the other axis. As explained, these typologies contribute differently to the creation of a Just City.

The typology "performing government" contributes by empowering certain groups. Performing governments develop plans and makes its own decisions where it can protect the needs of those whose voices are not heard enough. These may be minorities in society or non-physical parties, such as nature.

The second typology, "rightful government," also protects those without a voice, but in a more passive way. It shapes the background in which the process acts, but has little influence on the process itself.

The third typology, "cooperating government", contributes to the creation of a Just City by cooperating with private actors. These actors, who benefit from development, can then contribute financially to urban quality. This typology is wishful when making plans and assessing feasibility.

The fourth typology, "responsive government", refers to a government that responds to bottom-up initiatives and social developments. This typology thus contributes to the creation of a Just City and is particularly applicable to organic development processes.

Figures 198 to 201 illustrate the typologies and their contribution to the creation of a Just City is written underneath.

Performing Government
Empowering & protecting

Rightful Government
Protecting by soft steering

Cooperating Government
Building capacity

Responsive Government
Allowing bottom-up initiatives

Figures 198-201: Conclusions typologies role of the government

7.3 The Development Process
Design Typologies Assessment Model

The assessment of typologies on previous pages results in an overview of suitable typologies with a structural explanation of why they contribute or not to the creation of a Just City environment. This results in an overview of planning typologies that can be used to create a Just City development process. In table 47, this model is viewed. This creates a clear understanding of which typologies contribute in which ways. It is the product resulting from Step 4 of the 5-Step Methodology.

Typology	Score	Contribution
	53	+ Contributes to creating long-term and fixed plans for expensive inerventions, for instance, infrastructure & sustainability + Allows for plans in which private actors contribute to urban quality and everyone can benefit from public investments
	53	+ Contributes to the creation of temporary development and bottom-up initiatives + Allows for participation of users in the development process and to react to social developments
	4	+ Contributes to the creation of transparent processes and gives users the chance to debate and protest
	16	+ Contributes to placing the users centrally in the decision-making process and knowing what the needs are, such that public actors can translate these needs to action
	37	+ Contributes to allowing citizens and users to develop plans together and give expression to their ideas + Contributes to aligning actors in the development process
	37	+ Contributes by giving users and activists a voice in the decision-making process and giving them actual power
	46	+ Contributes by empowering and potecting users and activists
	17	+ Contributes softly by protecting users
	30	+ Contributes by bringing actors together and allowing private actors to financially contribute to urban quality
	51	+ Contributes by allowing bottom-up development and empowering citizens initiatives

Table 47: Overview of typologies of the design theme Development Process and their contribution to a Just City

7.3 The Development Process
Design Typologies Assessment Model

Figure 202 also provides a good overview of the results of Step 3 of the 5-Step Methodology. It shows the scores of each typology for the individual Elements of Urban Form from the Just City Framework. It provides information on how each typology contributes to each Element of Urban Form and thus provides insight into the influence of the typology on various aspects of a Just City.

This model, along with the table from the previous page, is the result of Step 4 of the methodology and provides a starting point to design from. The next page introduces a process design and explains how the different typologies land within it.

Typology	Continuity & Legibility	Character	Enclosure	Activity & Use	Quality of Public Realm	Mixture (Diversity)	Movement	(Climate) Adaptation	Development Process	Score
Integrated development process	●	·		●	●	●	●	●	·	53
Organic development process	●	●		●	●	●		●	●	53
Information provision									●	4
Surveys		·		●		●			●	16
Discussing & Experimenting		●		●		●		●	●	37
Direct Democracy		●		●		●		●	●	37
Performing Government	·	●		●	●	●		●	●	46
Rightful Government		·		●	·	●		·	·	17
Cooperating Government	·	·		●	●	●		●	●	30
Responsive Government		●		●	·	●		●	●	51

Scoring Legend

- ● -4 or less
- ● -2 or -3
- · -1
- 0
- · 1
- ● 2 or 3
- ● 4 or more

Figure 202: Design Typologies Assessment Model for the design theme Development Process

7.4 Development Process Design

The following pages detail step 5 of the 5-Step Methodology and explain a design for the development process. Although this design does not fully capture the complexity, it provides insight into how several high-scoring typologies from the Design Typologies Assessment Model can result in a design.

Development process design

The knowledge of previous pages allows the creation of a design for the development process. In this design, shown here and on the following pages, the typologies land in time and come together. The table showed that different typologies contribute differently to the creation of a Just City, and therefore it is desirable to combine the typologies in the proposed development process design. In this way, the process for creating a Just City is optimized and all typologies are used efficiently. The following explains how the typologies come together.

Two simultaneous processes

The design of figure 203 shows two simultaneous processes in an urban development, namely an integrated process, which extends over a longer period (30-50 years), and an organic process consisting of multiple short-term developments. In the design, these two processes take place simultaneously and complement each other.

The integrated process focuses on a fixed ambition and aims to develop that ambition over the long term. It creates the foundation from which successful development can emerge. It aims to create plans that often focus on expensive investments such as infrastructure and sustainability. For this process, it is important to create fixed and reliable contracts that actors cannot avoid. Although this process is always cyclical and there is organic movement through the stages of the process, the ambition is set so that the large-scale demands of successful development can be achieved.

While the integrated process focuses on a fixed and timeless ambition, the organic process is adaptable to changing socio-political ambitions. This process emphasizes small-scale projects and can respond to changing urban needs. This is important because, as explained earlier, the Just City is not a fixed concept, but an organic concept that changes over time. The organic design process creates space for these changes and allows for flexibility in the plans.

In the design, the two processes interact and complement each other. The integrated process creates the conditions and requirements from which the organic process can develop. At the same time, the organic process allows for flexibility and reactivity and therefore influences the integrated process in a positive way. In conclusion, the two simultaneous processes meet the needs of a Just City to create, on the one hand, a planning-oriented and long-term plan and, on the other hand, temporary and short-term urbanism.

Figure 203: Urban development process design (Based on the four phases of van Randeraat et al. 2022 (page 7))

7.4 Development Process Design

5 Integrate the most suitable solution into an optimized design that contributes to the development of a Just City

The development processes of both the integrated process, and individual projects in organic development, are broken down into four phases (van Randeraat et al, 2022). The following explains these phases and how the typologies of governance and democratic involvement land in each phase.

4 phases

The development process involves 4 phases (van Randeraat et al, 2022). The process starts with the initiative, then the feasibility phase follows, then the realization and finally there is the period of maintenance. This repetition of phases happens for the integrated process, in which the periods last several years, but also for the different projects in organic development, in which the time horizon is much shorter. Since all these phases have different objectives, different strategies for governance and democratic engagement must be applied. For each phase, the strategy is visible in the figure to the right. An elaboration of this strategy for each phase is on the following pages.

Conclusion

Figure 204 shows how all the typologies on page 207 are integrated into an overall process design. This illustrates how step 5 of the 5-Step Methodology works. It illustrates how assessment results in an optimized design that uses the strength of each typology. It shows how research and assessment can be turned into a (process) design. It should hereby be noted that the design does not fully grasp the complexity of urban decision-making and lacks perspectives from other disciplines. It primarily shows how new insights can be gained about the Development Process by applying the 5-Step Methodology on this theme.

Organic Design Process

Adjusting to changing societal needs

Integrated Design Process

Vision

Plan

Realization

Shaping long-term conditions

Strategy

Initiative

Performing & Responsive Government

feasibility

Performing & Cooperating Government

Realization

Performing & Rightful Government

Maintenance

Performing & Responsive Government

→ Fixed & long-term horizon

Changing socio-political context

Illustration of the cyclical process

Figure 204: Urban development process design, supplemented with roles of government and democratic engagement (Based on the four phases of van Randeraat et al, 2022 (page 7))

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7.5 Development Process Design
Phase 1: Initiative

The first phase of an urban development process is the initiative phase (van Randeraat et al., 2022). In this phase, the initiative for a new development is formed and the vision is shaped. The initiative phase occurs both in individual projects in organic development and in integrated development on a larger scale.

In this phase, it is important to form a vision in which citizens are heard and have power and to protect actors who are underrepresented by the government. Therefore, in this phase, the government must behave both as a performing government and as a responsive government. As a performing government, the municipality can play a guiding role in the development process and protect all actors. By behaving as a responsive government, it can allow bottom-up initiatives and respond to social developments, which also helps create a Just City environment.

The two governance strategies could be applied separately to the two types of development processes. In the integrated development process, the government would function best as a performing government, in which it takes a leadership role and strives to protect and empower all citizens in the development process. In the separated projects of the organic development process, the municipality would act better as a responsive government. Here the government should play a more reactive role and respond to social developments and initiatives. In this way, the two roles the government could take in the initiative phase could be adjusted to the development approach.

Performing government
For the performing government, it is important to know the needs of the various population groups and other actors. Therefore, an inventory of current conditions in the area should be made and the opinions of users should be collected. Tools that can be used in this phase are surveys and discussions/ experiments. This will help to create understanding of the needs and how they can come together. Direct democracy is also a suiting typology in this phase. It allows governments to play a steering role, but there is also power for citizens and users as they can have a say in whether the government is actually meeting their needs.

Responsive government
Responsive governments behave as a response to societal developments and initiatives from bottom up. Therefore, it is important to facilitate the development of these small-scale initiatives and to know how societal paradigms evolve. That is why it is important to keep discussing and experimenting with different actors. Also in this form there could be direct democracy, where users have direct influence on new initiatives that emerge.

Performing Government

Empowering & protecting

↓

Integrated development process

Responsive Government

Allowing bottom-up initiatives

↓

Organic development process

Figures 205 & 206: Performing & responsive government in phase 1 of the development process (Based on Gemeente Weert (2020) & van Randeraat et al, 2022)

Figure 207: Democratic engagement tools in phase 1 of the urban development process

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7.6 Development Process Design
Phase 2: Feasibility

In the second phase, after the vision is formed, a plan is created (van Randeraat et al., 2022). This plan is a strategic translation of the vision and an eleboration of the ideas. In this phase, decisions are made about how the development will be financed and how, for example, land ownership will be distributed and what form of public-private partnership will be used. This phase says something about how public investment is applied and who benefits from it. Again, this phase occurs in both the integrated development process and the organic development process.

For this phase, it is important that private parties contribute (financially) to the creation of urban quality and therefore they should be involved in the development process at this stage. It is therefore desirable for the government to act as a cooperating government in the feasibility phase. It can make connections between stakeholders and thereby engage in capacity building and create financial feasibility for development. On the other hand, it is important that private actors do not gain too much power and bear too little risk. Here, the government must still play a leading role and act as a performing government. It can do this by developing itself, but also by establishing firm contracts that protect the needs of all users.

Integrated development
Integrated development involves large investments and, as mentioned, it is important that private parties contribute to it. Therefore, it is important for the government to behave as a performing government and strategically direct development. Yet, it is important that this is done in a democratic manner. Therefore, the government should engage in transparent and clear information and still invite users to the discussion table. In this way, users gain insight into where public money is going and whether it is worthwhile. Also, there can still be direct democracy where users have a binding voice in the development of the plan.

Organic development
In organic development, the feasibility phase stems from the vision phase where bottom-up initiatives were created. Here it is important that the government either takes an executive role and develops the initiative itself or links the project to a private actor by being a cooperating government. Here, it is important that the government or private actor does not take over the leading role and that the citizen retains a strong voice in how it is developed. Therefore, the users should still have a strong voice around the discussion table and direct democracy can be created in which the users still have a strong voice over the plan development.

Performing Government

Empowering & protecting

Cooperating Government

Building capacity

Figures 208 & 209: Performing & cooperating government in phase 2 of the development process (Based on Gemeente Weert (2020) & van Randeraat et al, 2022)

Figure 210: Democratic engagement tools in phase 2 of the urban development process

7.7 Development Process Design
Phase 3: Realization

In the third phase, realization occurs (van Randeraat et al., 2022). In this phase, the plans made in the feasibility phase are realized and translated into reality. In this phase, it is important that actors "stick to the plans." This means that actors must realize the plans as discussed in the feasibility phase and not deviate from them. Therefore, it is important for the government to control and monitor development and thus behave as an performing government. In addition, it should also behave as a rightful government where it sets rules and conditions for realization.

Integrated development
Especially for integrated development, it is important for the municipality to play a leading role in the realization phase. It must check whether the actors stick to the plans. Since integrated development often involves high investments and costs, it is important that all actors keep their promises and that the government monitors them. Therefore, the municipality must play a strong steering role and be above all other actors. It must also protect citizens, users and activists and ensure that their needs are protected during the realization phase and that they are involved in the development. Therefore, it is important to engage in information provision during this phase and ensure that everyone still has an understanding of the transparent process.

Organic development
Individual projects in organic development have their own realization phase. In this case, there is usually one developing actor. The government must still control this actor and make sure that he follows the assigned rules. It is also important to set strict conditions for development and be a rightful government that gently protects users and activists. Again, it is important to avoid deviating from plans and to have a transparent process.

Performing Government

Rightful Government

Figures 211 & 212: Performing & rightful government in phase 3 of the development process (Based on Gemeente Weert (2020) & van Randeraat et al, 2022)

Figure 213: Democratic engagement tools in phase 3 of the urban development process

7.8 Development Process Design
Phase 4: Maintenance

After realization, the period of maintenance begins (van Randeraat et al., 2022). Since an urban development is never finished, this is a period that slowly flows back into the initiative phase. An urban development should never be considered finished, which is why it is important to always keep an eye on how things are going and what can be improved. Therefore, it is important for the government to continue to play a steering role in this phase and act as a performing and responsive government, just as in the initiative phase.

In the maintenance phase, it is important that users, entrepreneurs and activists regain power over the development. Therefore, the government must act as a performing government in which it empowers and protects these actors. Through this hierarchical and directing role, the government can initiate new developments that in turn contribute to the Just City. On the other hand, the government must listen carefully to bottom-up initiatives and therefore acts as a responsive government. Through this combination, the government is able to create a Just City environment in which bottom-up initiatives have space to develop, but also protect actors whose voices are not heard.

Performing Government

Responsive Government

Figures 214 & 215: Performing & responsive government in phase 4 of the development process (Based on Gemeente Weert (2020) & van Randeraat et al, 2022)

Figure 216: Democratic engagement tools in phase 1 of the urban development process

7.9 Development Process Design
Actors

Power of actors

The development process design that results from taking step 5 of the 5-Step Methodology affects the power field of actors and the extent to which certain actors can influence decision-making. At different stages, the power field changes and stakeholder relationships adjust. This is explained below, using the actors involved in the Zuidas development explained on page 76, as example.

In the initiative phase, the proposed strategy gives more power to users, activists, entrepreneurs and the municipality. Other actors, such as private developers and the province or the state, behave in the background and are only informed. In this phase, it is important to create a vision that meets the needs of the users, and therefore other actors should stay out of the picture.

In the second phase, it is important to have a fair and appropriate plan that translates the vision into realistic plans. In this phase, other actors who can contribute financially to the development are invited to the discussion table. It is important that these actors join the process now, so that those who profit in the area also contribute to urban quality. Stakeholders such as the state and province, or ProRAIL and Rijkswaterstaat are also important actors in this phase, as they can contribute financially to the development.

In this phase, all actors become more prominent and have power. Citizens and activists also retain power with direct democracy and their power at the discussion table. As all actors have power, the municipality takes a leadership role and directs development.

In the third phase, the realization phase, the plans have been realized and the actors have reached an agreement. It is important in this phase that the actors "stick to the plan" and therefore their influence is reduced. Private actors fade into the background and only the municipality remains as the steering organization of the process and the legitimate government that checks whether everything is developed as planned.

In the maintenance phase, the actors start behaving again as in the first phase. Citizens, activists, entrepreneurs and the municipality control the area again and take the initiative when a certain change is needed.

Design contribution & the 5-Step Methodology

Although the process design proposed in this chapter serves primarily as an illustration of how step 5 of the 5-Step Methodology can be applied, it also contributes to the discourse on how urban development processes can be made more just. Although the design does not fully exploit the complexity of urban planning, it can be seen that application of the 5-Step Methodology leads to new insights on how the development process can be designed and how new power structures can be established. This highlights the power of the methodology as it provides information on how certain approaches do or do not contribute to the creation of a Just City. Although the design in this chapter does not cover all elements and disciplines of urban planning, it can be seen that the application of the methodology leads to new and innovative ideas about urban decision-making. For further research, it is recommended to include more perspectives from different disciplines and develop the process design further. Still, the chapter has provided an overview of how to create new typologies for the development process, how to derive a Design Typologies Assessment Model from there, and how to integrate the most suitable planning solutions.

Figure 217: Changing power structures during the development process

7.10 Conclusion

The research question that this chapter aimed to answer is:

How can a new methodology result in concrete planning and design strategies that allow the Just City to revive?

The chapter focused on showing how the 5-Step Methodology works for the design theme Development Process and on developing a concrete planning strategy. Typologies were developed for addressing an urban development process. Then these typologies were assessed, using the Just City Framework as an assessment model. From this, a summary derived with a score and an elaboration of how the typologies do or do not contribute to the creation of a Just City. Finally, a design was developed which integrated the most suitable planning typologies. The typologies reviewed consisted of planning approaches, typologies for democratic engagement, and typologies for roles that government might take.

The assessment of the typologies created insight into the contribution of certain typologies to the creation of a Just City. This demonstrates the power of the Just City Framework and how it can be used in urban decision-making. In addition, Step 4 of the methodology also formed the starting point for strategizing future development processes in Amsterdam. The chapter applied step 5 and a design of a development process, in which the high-scoring elements from the Assessment Model landed in different ways. Even though this design is not context-specific and lacks perspectives from other disciplines, it allowed for new ideas on how to design the development process. Further development of the design is recommended for further research. Nevertheless, the chapter provided information on how the 5-Step Methodology can be applied and lead to new approaches.

Comparison with current situation

The proposed strategy resulting from the application of the 5-Step Methodology differs from the existing (neoliberal) strategy for urban development in Amsterdam. As page 116 shows, the neoliberal strategy results in a score of -33 and therefore contributes negatively to the creation of a Just City Amsterdam. The proposed strategy uses the Just City Framework as a starting point and therefore contributes positively to the creation of a Just City. This is because this strategy addresses all points of the Just City Framework and includes typologies that contribute to a Just City in different ways. This is in contrast to the Zuidas development that focused only on the aspects of sustainable development and the development of walkable and bikeable areas, and scored negatively on other Just City principles.

This chapter has answered the final research subquestion of this thesis. The next chapter will provide a conclusion to the study and answer the main research question. Finally, there will be a reflection on the thesis research as a whole.

8. Reflection

The last chapter provides a reflection on the thesis research. The research outcomes will be explained, as summary of the project. Subsequently, a reflection on the research outcomes and the chosen methods will be provided. Also, a discussion will be provided which gives an overview of the scientific and societal relevance and discusses the relation with the research at the TU Delft. An elaborative reflection will be done on the research results and the process and the limitations will be explained. Furthermore, advises for further research will be given. Afterwards, a conclusion will be provided, in which the main research question will be answered. The chapter ends with a personal reflection.

Photo 28: "Raadszaal in het stadhuis aan de Oudezijds Voorburgwal 197 met protesten op publieke tribune tegen de aanwezigheid van een raadslid van de Centrumpartij in de nieuwe gemeenteraad" (Stadsarchief Amsterdam/ANEFO, 1986)

8.1 Research outcomes

This report began with a clear problem. While Amsterdam was known as Just City in the 1970s, it is currently losing this status and the city is becoming increasingly inaccessible to certain population groups (Uitermark, 2009). Not only did the neoliberal ideologies of the 1980s and 1990s lead to a large decrease in social housing and a change in functions, the introduction of private parties also created a complex decision-making environment (Taşan-Kok, 2010). While the importance of reviving the Just City that Amsterdam once was is growing, there is a knowledge gap on how to re-plan and design a Just City, in the contemporary complex context.

The research project focused on this problem field. The aim was to create a renewed understanding of the requirements that make the contemporary Just City and to develop a methodology that allows the complex concept of a Just City to be grasped. Although there is awareness of the fact that (spatial) justice can never be fully achieved (Pellissier-Tanon & Moreira, 2007) and the complexity is not entirely comprehended within the scope of this project, the products contribute to the scientific discourse of steering complex development processes towards a revival of the Just City. Tangible instruments are provided that can be used and further developed by any urban planner, designer or other stakeholder in urban development.

This theses developed principles that encompass the demands and requirements of the contemporary Just City. Subsequently, these principles led to a Just City Framework. This framework represents the main research outcome of this thesis and formed the starting point for the establishment of a 5-Step Methodology. This methodology enables the development of a design that includes the requirements for Just City environments. It involves a sequence of steps that ultimately lead to a Design Typologies Assessment Model. This model provides insight into how different design typologies may or may not contribute to spatial justice. Furthermore, the thesis provides examples of how typologies can be integrated and elaborates on how the methodology works in practice. The following is an explanation of the main products of this research. Later, an elaboration of the main conclusions is being provided.

1. The Just City Framework

The first and most important research outcome of this project is the Just City Framework. This framework derives from extensive analyses, namely historical, data, stakeholder and literature analyses. Detailed research was conducted to answer questions as "What made Amsterdam a Just City in the 1970s?", "What problems does Amsterdam face today?" and "What problems arise in urban development processes in Amsterdam?". From answering these questions, planning and design principles emerged, which formed the input for the Just City Framework. The framework establishes a relationship between Elements of Urban Form, Just City Values and the planning & design conclusions from analyses and is therefore a valuable instrument for understanding the complex concept of a Just City.

A current limitation of the Just City Framework is the lack of perspectives from other disciplines and backgrounds. For further research, it is recommended to develop the framework further, in order to make it more complete. Fortunetely, a strength of the framework is its adjustability. The framework can endlessly be adapted to context-specific demands and changing socio-political values.

The research uses the Just City Framework in various ways. It functions not only as starting point for the design process, but also as an assessment model. The function as assessment model makes the product most suitable for existing urban areas, since the situation before can be well compared with the situation after designing.

1. Just City Framework

Figure 218: Just City Framework

8.1 Research outcomes

Preperatory steps

0.1 Do analyses

Research the strength and weaknesses of the location and inventorize the needs and wishes of important stakeholders

0.2 Adjust the Just City Framework

Translate conclusions from context-specific analyses into planning & design principles and include them in the framework

5-step Methodology

1 Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2 Develop typologies for that design theme

Design Typologies

3 Assess the typologies with the Just City Framework as an assessment model

4 Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

Assessment model of suitable design solutions that contribute to the creation of a Just City

5 Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

Figure 219: 5-Step Methodology

2. 5-Step Methodology

2. 5-Step Methodology

The second outcome of this research is the creation of a 5-Step Methodology that allows urban planners and designers to develop a design for Just City environments and processes. It contributes to understanding which planning and design typologies do or do not contribute to achieving spatial justice and to integrating these typologies together into an optimized design. The methodology consists of 5 steps and the Just City Framework is used as a starting point for development and as an assessment model. This methodology can be used by any stakeholder in the decision-making and helps to understand which decisions lead to the best urban quality.

Not only did the report illustrate how the 5-Step Methodology can be applied in theory, additional research in Appendix A.3 illustrated how the methodology works in practice. In doing so, it became clear that two preparatory steps are needed to adapt the Just City Framework to context-specific requirements. In addition, some recommendations for further research became clear. For instance, the functioning of step 5 in practice should be further investigated and more experiments examining the performance of the methodology in practice are needed.

3. Design Typologies Assessment Models

Applying the 5-Step Methodology in chapters 6 & 7 of this report, led to the creation of Design Typologies Assessment Models for five different design themes. These models consist of basic planning and design typologies commonly found in urban development and are the result of applying the first four steps of the 5-Step Methodology to the design themes. It creates insight for any urban planner and designer into how different typologies may or may not contribute to creating Just City environments. Additional research in Appendix A.3 has illustrated how the basic typologies from the Assessment Models can be used in practice, demonstrating their value. Nevertheless, the additional research also showed that while the scores in the Design Typologies Assessment Models sometimes serve as indicators of added quality, it is always necessary to redo the assessment for the context-specific location. Furthermore, it became clear that the scores in the Assessment Models serve more as input for discussion than as absolutely fixed results.

Figure 220: Design Typologies Assessment Models

3. Design Typologies Assessment Models

Reflection on the results
Pages 222 to 225 summarize the results of this graduation research. New products are created that enable steering complex urban developments and creating spatial designs that contribute to the establishment of Just City environments. This contributes to scientific knowledge about planning for spatial justice and democratic decision-making.

The strength of the research outcomes is their flexibility. The products are adaptable to context-specific needs and changing socio-political conditions. This embraces the complexity of contemporary urban planning and protects the power of local citizens in urban development. Since the Just City is a concept that is always evolving, it is important that the steering products react to these changes. The proposed products and methodologies behave in response to societal fluctuations.

The flexibility of results can be cited as the greatest strength of this research on the one hand, but also as a threat on the other. It allows the creation of democratic power by local citizens over a development, but if the flexibility is not used in the right way, there is the risk that private parties will take over this power and a property-led development will arise again. Therefore, it is always important that the flexibility of the research outcomes remains protected and used properly by policymakers and urban planners. It is important to emphasize that policymakers must actively protect democracy in the use of the products.

Although attempts were made to incorporate as many viewpoints as possible in this project, the complexity of contemporary urban development is not fully comprehended in the results. Various disciplines were not involved in the creation of the products and the perspectives of different stakeholders are missing. While the current status of the products already includes many aspects relevant to contemporary urbanism, the products are not yet complete. Further exploration of planning and design principles is needed. Since the concept of a Just City is always evolving, the products should never be considered finished. Continuous reconsideration of planning and design principles is needed when using the research outcomes in practice.

Strength of the Just City Framework as assessment model
The report describes the function of the Just City Framework as an assessment model. The framework makes it possible to measure whether or not an urban development meets the requirements of a Just City. Reflecting on the results, it can be said that this is the most valuable achievement of the study. Although the application of the 5-Step Methodology needs much further development and testing in future research, the Just City Framework can already be used as an assessment model now. It enables urban planners and designers to understand whether or not certain conditions are spatially just.

The 5-Step Methodology
While the Just City Framework can already be used as an assessment model, the use of the 5-Step Methodology needs further development. Applying the framework in practice and integrating the most suitable design solutions into a spatial design requires elaboration. Although the thesis has taken the first steps towards a new strategy, its implementation in practice needs further refinement.

Can a Just City be achieved completely?
It is also important to look critically at the purpose of this thesis. The research aimed to contribute to spatial justice and the revival of Just City Amsterdam. Hereby, it is important to clarify that these values can never be achieved to the fullest. As Pellissier-Tanon & Moreira (2007) write, justice is a value that can never be completely reached. There will always be some degree of injustice in urban development and it is important to define which amount of injustice is acceptable. This also emphasizes the relationship between the products of this thesis and a wider political discussion. The products allow us to grasp the concept of a Just City but a wider political discourse is needed to decide on what a Just City exactly is and what requirements belong to it.

Scope of the project
This thesis focused on the project location of Amsterdam. The research outcomes are applicable to other locations in the Netherlands and in the world. Nevertheless, it is important to underline that the outcomes are most applicable to the metropole because they derive from extensive analyses here. An establishment of the Just City Framework after analyzing other cities, would result in different planning and design principles and therefore a different setup of the Just City Framework. It is important to clarify that the framework can be used for assessing other locations, but that one should be aware of the limitations.

Reflection on the Sustainable Development Goals
The United Nations (n.d.) has developed a set of Sustainable Development Goals. This thesis aimed to develop integrated solutions that make a contribution to a variety of these goals. While the main focus of this thesis was on goals such as "No poverty", "Reduced inequalities" and "Sustainable cities and communities", the Just City Framework also succeeded in creating a contribution to goals such as "Good health and well-being" and "Life on land". To illustrate how the Just City Framework and the other results of this thesis contribute to the Sustainable Development Goals, figure 221 provides an overview. While currently, the products don't contribute to all

goals equally, there is an opportunity to do so in the future. If in future development, more perspectives from other disciplines and professions are included, the Just City Framework can develop as more complete. Planning and design principles that contribute to other SDG's can be incorporated into the Framework.

Reflection on the process
The results of this thesis have been developed over a process of a year. A big part of this process has been spent on doing research, and therefore the thesis is very research-based. Much time has been taken to do literature, historical, data and stakeholder analyses and this led to valuable input for the development of the Just City Framework. Subsequently, time has been spent on developing a methodology for the use of the framework and trying this methodology out.

Although a well attempt has been made to do the assessment of typologies in a non-subjective way and following a consistent measurement strategy, the assessment that has been done contains personal interpretation from the author and is therefore partly subjective. Due to time constraints, there was no possibility to involve users or other stakeholders and let them do an assessment of the typologies. This time limitation resulted therefore in the end in a limitation of the research. If more time would have been available, different assessments could have been collected and this could have resulted in an even better and correct Design Typologies Assessment Models.

It can be argued that the use of time during the process has advantages and disadvantages. As much attention has been paid to the research phase, this has resulted in an inclusive and grounded Just City Framework. The research-oriented process has therefore led to a good embracement of complexity in the Just City Framework. This is positive since this product formed the most important outcome of the research. At the same time, there was limited time for the creation of the Design Typologies Assessment Models. Some degree of personal interpretation was inevitable. If more time had been available, multiple actors and especially users would have been involved in the assessment, so the scoring could have been more correct.

Reflection on the methods and instruments
The main methods used in this research were analyses (literature, historical, data and stakeholders) that this led to the creation of the Just City Framework. Although it was not always certain where these analyses would lead, this was a good method to gather scientific information and make sense of the complexity of this research. Many perspectives and disciplines were explored so that a complete and inclusive Just City Framework could be created. Because of the extensive research, this Just City Framework is the most valuable result of this thesis.

Other methods used were methods in which typologies were created and assessed. This was another suitable method to use because it showed how the Just City Framework works and allowed for a practical translation of the framework. The assessment method could have been further developed and tested by involving different stakeholders. Also, the strategy of optimization of the most high-scoring design solutions in step 5 of the Methodology could have been more elaborated and it is recommended for further research to further develop an optimization strategy. Concluding, it can be said that the methods used were suitable for the aim of the project. Nevertheless, how the products are exactly being used in practice, could be worked out in further research.

Transferability
As said, the use of the Just City Framework as an assessment model is one of the biggest strengths of this research. For this function of the Just City Framework, the transferability is high. Urban planners and designers can already start adopting the framework as an assessment model to see whether certain development areas fulfill the needs of a Just City.

On the other hand, the 5-Step Methodology should be worked out further before applying it in practice. It is recommended to do experiments in practice with different stakeholders, to see how it can work. Nevertheless, the work could already be proposed to different stakeholders and policy-makers, in order to start a discussion of how it can be implemented in the temporary development process. Hereby, the products already function as discussion-starter for the socio-political discourse of planning for justice.

Figure 221: Illustration of how the research contributes to the Sustainable Development Goals of the United Nations (United Nations, n.d.)

8.3 Limitations

In previous pages, the limitations of this study have already become clear. Below, these limitations are explained in more detail and subsequently recommendations are made for further research.

Personal interpretation in Design Typologies Assessment Models

The first limitation of this study relates personal interpretation in the establishment of the products. In this thesis, the products were created and the assessment was conducted by a single researcher and thus did not include a wide range of ethnic backgrounds, education levels and genders. Although special attention was paid to researching the different needs of the actors and the author attempted to remain as objective as possible, no other actors were involved in the creation of the final products. Due to time constraints, it was not possible to have different actors to review the planning and design typologies or to ask whether, in their opinion, any principles are missing in the Just City Framework. Therefore, it is important for the research results to be further developed and validated by different urban users in the coming years.

Grasping the complexity & incorporating different disciplines

The research attempted to embrace the complexity of contemporary urban planning. This complexity is also embraced in the flexibility of the Just City Framework and 5-Step Methodology. By allowing flexibility and adaptability, the framework can still evolve and incorporate new aspects of the complex decision-making environment, even if they are context-specific. Nevertheless, it remains important to emphasize that many aspects of the complex urban development context are not considered in this study. Examples include aspects of ownership and finance. Because properly embracing complexity means including all types of expertise, it is important to further develop the framework with a diverse range of actors. A current limitation of the research is therefore that perspectives from other disciplines and expertises are lacking.

Bias in the use of the products

The research in this thesis report aims to develop a strategy that can be used to steer complex urban development in a direction where the Just City can be revived. This involves developing an assessment strategy that can be performed by any stakeholder in the process. When this assessment is carried out in practice, it is important to involve a wide range of stakeholders and especially users. When the assessment is conducted only by policymakers and designers, there is a risk of bias. When policymakers can assess their own plans, a situation may arise where designed plans are assessed too positive. To avoid bias in practice, it is important that a wide range of stakeholders consult the assessment.

Step 5 of the 5-Step Methodology

During the study, an experiment was conducted in which the 5-Step Methodology was applied in practice. This revealed the interdependency between different typologies. The experiment showed that the scoring of typologies was strongly dependent on other conditions in an area. As a result, the assessment of one typology depends on the choice of another typology. This interdependency makes step 5 of the 5-Step Methodology, the step of integration, more complex. Therefore, it is important that step 5 is continued to be done democratically and with the involvement of various stakeholders. For future research, it is recommended that step 5 is further explored and a strategy is developed to best integrate the highest scoring typologies from the Design Typologies Assessment Models.

8.4 Further research

Further research could help to reduce the limitations of this research.

Further development of the products

The products resulting from this thesis research must be further developed in future research. For instance, the Just City Framework can be further developed by exploring new disciplines and bringing in experts from other fields. The 5-Step Methodology and the Design Typologies Assessment Models can also be further developed. In doing so, efforts should be made to make them practically applicable and implement them in the existing governance structure.

Experimenting with actors

As mentioned, one of the limitations of this study is that it was produced by one author and therefore from one perspective, without involving other actors from different ethnic backgrounds, educational levels, and sexual orientations. Therefore, a recommendation is to initiate a study in which different actors shine their light on the Just City Framework and the 5-Step Methodology. Conducting experiments in which different actors complete the assessment would allow for comparison and an examination of the objectiveness of the assessment model. The research could include interviews and surveys to see if actors think principles are missing and values are not being seen. Through these experiments with stakeholders, the Just City Framework could become more specific and comprehensive and therefore more useful for urban (re)development.

Using in practice

Another recommendation for further research is to use the Just City Framework and the 5-Step Methodology in practice and to experiment with it. By applying the products on a specific location, the use of the Just City Framework could be tested in a context-specific environment. The adaptability and flexibility of the framework could be tested in this way, and more information could be obtained about how the framework would function in real-world development processes. By involving stakeholders, more knowledge will be gathered about how actors respond to the products and whether or not the instruments are suitable to guide the development process.

Step 5 of the Methodology

As observed, a limitation of the study is that not much attention has yet been paid to step 5 of the 5-Step Methodology. Integration takes place in this step, but the interdependency between different typologies makes this step complex. For further research, it is recommended that a strategy is being developed for how to best implement step 5. In doing so, it is important to protect democracy in integration and continue to involve a variety of stakeholders.

8.5 Discussion

Relation with earlier research

The findings of this study align with previous research on the concept of the Just City, while also taking the research field a step further. It took into account previous insights from, for example, Rocco et al. (2019) and Griffin (2018), while also gathering new information. While other writers kept the concept of a Just City undefined and intangible, this research went a step further by creating a tangible understanding of it. Therefore, it builds on existing knowledge while also bringing in new knowledge. It does not contradict the existing literature, but has incorporated and further developed it. Still, there are opportunities to align the research with a broader scientific field in the future. For instance, scientific relevance could be deepened by including perspectives from other disciplines. Similarly, societal relevance could be broadened by further exploring how the methodology works in practice.

Scientific relevance

Gerhold et al. (2022) describe a study as scientifically relevant if "they represent findings that are new, worth knowing and accepted by the scientific community" (p. 101). The research in this thesis report meets these requirements in several ways because the concrete and practical approach can be labeled as new and innovative. Also, the knowledge is worth knowing because it answers a knowledge gap. Planning for equity in the complex urban development context is a topic that is often written about and needs attention. Finally, the research is also accepted by the scientific community because it does not contradict existing knowledge and takes into account the existing literature. It continues to work on it and is thus scientifically relevant. Nevertheless, there are also opportunities to make the research even more scientifically relevant. If the products were further developed and included more viewpoints from different disciplines, the innovativeness of the research could increase and the products would be accepted by a larger part of the scientific community.

Societal relevance

Although (spatial) injustice is an issue that does not affect everyone in a community equally and directly, it is relevant to every urban dweller. Jones (2009) emphasizes that it is not only important from a moralistic point of view but that justice is also an important condition for social growth in society. According to him, poverty reduction automatically leads to greater social cohesion, efficiency and economic growth. Moreover, he emphasizes the importance of justice in creating political safety and preventing polarization. This highlights the social relevance

of this thesis, as the goal of the project is to contribute to justice, and Jones (2009) shows that this is important not only for those directly disadvantaged by the current system, but also for all other users of the city. However, it is important to emphasize that the thesis makes only a small theoretical contribution to a larger political discourse. To make a lasting contribution, the products must be adopted in practice by public actors and further developed to make them applicable at different levels of governance.

Relation between research and design in this project

This thesis is heavily research-based. Knowledge was gathered about what made Amsterdam a Just City in the 1970s, why and how this disappeared, and what problems exist in the city of Amsterdam today. This knowledge was used as input for the design phase of this research. It served to design a Just City Framework and a 5-Step Methodology. Collecting the knowledge and conclusions from the research phase made it possible to create a design that was valuable and scientifically related to existing information. Moreover, because the design of the Just City Framework was based on scientific information, the establishment of spatial typologies could also be tested against factual information and assessed with a scientific approach.

This thesis established a relationship between (spatial) design and research. An assessment has been developed that allows a scientific argumentation for the choice of a particular design intervention. This is a unique contribution to spatial design and enables new relationships between scientific research and design. Not often do spatial designs have a scientific and research-based foundation, and since this thesis research makes that possible, it contributes to a further interweaving between research and design.

Future product development brings opportunities to further explore the relationship between design and research. The application of the methodology in practice in Appendix A.3 illustrated that further exploration of specifically step 5 of the Methodology is needed. This is where the step of integration takes place, and the practice showed that complex interrelationships between different typologies complicate this step. Here, further research can be consulted in which the power of urban design can be used to achieve optimal design outcomes. If this is examined deeper, an even stronger relation between research and design can be established in the products.

In conclusion, the approach of this research in the first four steps of the 5-Step Methodology allows for a strong relationship between research and design. Nevertheless, in step 5, the step of integration, the role of urban design can be further explored to arrive at a design that best contributes to the creation of an Just City.

Relation with the Planning Complex Cities Studio

The research in this thesis aligns well with the goals of TU Delft's Planning Complex Cities Studio. As the studio's website says (Planning Complex Cities TU Delft, n.d.), research in this group often begins with an "observation in and conflicts arising from the distribution of spatial resources across communities and territories." By examining planning schemes, governance models, participation and planning methodologies, the students seek to understand the multilingual dimension of urban development. Often no fixed plan or strict advice results from this, but new perspectives and tools are provided to explore complexity. These tools aim to enable decision-makers to find structure in the complexity while also embracing it and acting within it.

This research thesis aligned well with the objectives of the Planning Complex Cities graduation studio. It created models and frameworks to grasp the concept of a Just City without providing a fixed definition for it. The research results still provide sufficient flexibility for changing societal and context-specific contexts and therefore embraces the complexity of urban development. The main purpose of the results is to provide policymakers and other stakeholders with the tools to understand the intangible concept of spatial justice while leaving room for interpretation by different stakeholders. Nevertheless, further development of the products is recommended in order to make an even greater contribution to the studio's research.

Relation with the Urbanism Track

The research of the Studio Planning Complex Cities contributes to the larger Department of Urban Planning at TU Delft. This department strives to integrate different disciplines, such as urban design, landscape architecture and spatial planning. Although this research focused mainly on the latter, it succeeded well in developing a relationship between different aspects of urban metabolism and enabled the understanding of both the spatial dimensions of planning for a Just City and the non-spatial aspects. The results contribute to academic knowledge on the relationship between societal challenges and urban form. It provided a scientific foundation of why to choose a particular intervention and thus contributed to the objectives of the Urbanism track in which studies strive for integrated solutions in which different qualities come together. A further integration can be realized by incorporating different perspectives from various stakeholders in the development of the products.

Relation with the Master Program

Finally, the Urbanism track is part of the Master of Science in Architecture, Urbanism and Building Sciences. As the website explains, this master aims to create a multidisciplinary approach that enables integrated spatial solutions (TU Delft, n.d.). This thesis contributed to this goal by creating a framework that integrates different aspects of planning for a Just City, while always relating them to urban form and the urban development process. In doing so, the research aimed to create an answer to social issues, but always through the adjustment of space. Although the research took a multidisciplinary approach, the multi-scale approach could be strengthened in future research. Attention can be paid to the implementation of the products on different spatial levels and governance levels. Although the research contributed to many of the objectives of the master's program, further research could be conducted to integrate specific remaining objectives from the program.

8.6 Conclusion

The research question of this thesis is:

What are the key elements of a methodology that allows spatial planners and designers to grasp the concept of a Just City and to develop concrete planning and design strategies that contribute to the revival of the Just City in Amsterdam?

The Just City Framework constitutes an important part of the answer to the research question. It enables a better understanding of the concept of a Just City, and its adaptability makes it a sustainable model for future socio-political change. The power of the framework as an assessment model allows urban planners and designers to determine whether or not an urban area contributes to the creation of a Just City. Although the framework is not finished and further research is needed to make it more complete, it bridges an important gap between an intangible concept and concrete design solutions. It answers the first part of the research question and contributes to answering the second part.

The 5-Step Methodology, which derives from the Just City Framework, further contributes to answering the research question by allowing concrete planning and design strategies to be developed. If the 5 steps are followed correctly, it is possible to understand why certain design choices contribute to the creation of a Just City and why others do not. The methodology contributes to the development of strategies that enable the creation of a Just City. The methodology needs further development and exploration of how it can be applied in practice is required. Therefore, it is not directly applicable today. Nevertheless, a contribution to the scientific research on planning for justice is made.

Finally, also the Design Typologies Assessment Models contribute to the creation of tangible design strategies that serve a Just City. These products provide an answer to the second part of the research question. Although the Assessment Models are not finished and the scorings serve more as discussion-starter than as absolute numbers, the products provide an understanding of why certain design interventions lead to the creation of a Just City and others do not. This allows for a scientific foundation for the creation of concrete planning and design strategies that contribute to the revival of Just City Amsterdam.

Although the products of this thesis contribute to the research question, it is important to note that additional research is needed to further develop the products and make them applicable in practice. The current status of the products provides the first steps towards answering the research question. For an adequate answer, further research in practice is needed and the products should be further evaluated with input from various stakeholders in the development process. Hereby, strategies must be developed to avoid bias in practice and protect the democratic value of the products at all times.

Not only is it important to emphasize that further development of the proposed products is needed and that the current status of the products contains limitations. For an appropriate response to the research question, it is important to underline the difficulty of seeking for a Just City itself. As justice is a value that can never be fully achieved, there will always be some degree of injustice in urban development. Therefore, further discussion is needed about what justice means and what level of injustice is accepted in urban development. Future development of the products should go hand in hand with a socio-political discourse of what a Just City is and how (spatial) equity is envisioned. This discourse is needed to further elaborate an answer to the research question, to shape the concept of a Just City and refine the research products.

Figure 222 shows how the research allowed us to form an answer to the problem statement. It visualizes how the Just City was once there and has now disappeared due to a changed planning paradigm. A city has emerged in which spatial justice is threatened. This project has contributed to an answer to this problem by creating a methodology that embraces today's complex decision-making environment and enables the development of an inclusive Just City. Nevertheless, the products need to be further developed and it must be understood that spatial equity can never be fully achieved.

Figure 222: Visualization of the conclusion

8.7 Personal reflection

I'm looking back at a rich graduation project. My objective at the start of the project was to develop my academic skills further and learn more about how to do urban design with a scientific and academic foundation. Also, I wanted to learn more about how to approach the complexity of contemporary urbanism and how to develop structure in it without neglecting it. I think I succeeded in both of these goals and learned a lot about how to develop different perspectives on complex development, and developing models that incorporate changes in socio-political circumstances. Also, I learned about how to empower citizens in the development process and translate their needs into concrete actions. This knowledge will be very useful for my further career and for that, I'm grateful.

During the process, I developed myself further as an academic. I learned how to set up scientific research and how to define a problem field. While it wasn't always easy to define this field and make it graspable, I developed my skills in making decisions and setting priorities. On a personal level, I learned to trust the process and to be confident that eventually, the loose ends will come together. I enjoyed seeing how everything came together in the Just City Framework and feeling that I made a contribution to scientific knowledge. In the coming years, I would like to develop the products further in my job and see how they could land in practice.

The topic of this thesis has interested me very much since the beginning of this year. I wanted to develop my knowledge about planning for justice and equity. I'm personally very interested in this topic since it bothers me a lot that there is so much inequality in the world and systems are unfair. I want to contribute to a world in which inequalities are limited and everyone has the same opportunities. I'm very happy that I was able to develop myself further in this field on a personal level, such that I can keep contributing in the future.

I would like to thank my mentors Rodrigo Ordonhas Viseu Cardoso and Reinout Kleinhans for their support. I enjoyed our meetings together and learning from their knowledge. Also, I would like to thank Robbert Jan van der Veen for his support and input in the first semester of the research.

Finally, I would like to say that I experienced my graduation year as a fun time. I got to know new people and made new friends. I learned a lot from my mentors and the mentor meetings we had. Looking back, I feel grateful for the experiences. Now, I'm looking forward to new adventures and the start of a beautiful career.

Amber Luesink
January 13, 2023

Appendix

Below, an overview is given of the references, used in this research. The references are shown per chapter and in order of where they appear in the chapter.

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A.3 List of figures and tables

On the following pages, an overview is given of the photographs, figures and tables that arise in this report. The references used are shown, together with the page where it is shown.

A.3 List of figures and tables

A.3 Using the methodology in practice
Introduction

This report delivered a new methodology that allows complex urban planning to move in a direction where the Just City of Amsterdam can be revived. Although the report has explained this new methodology and its steps in theory, it is useful to gain insight into how the methodology may be applied in practice. Therefore, this Appendix chapter presents an example of applying the 5-Step Methodology to an urban development. Hereby, the Sloterdijk Station Area in Amsterdam is examined. Attention is given to the steps that must be completed before the 5-Step Methodology can be adopted and how the Design Typologies Assessment Models from pages 178 to 181 can be adjusted to a context-specific location. This appendix chapter explores how the information from this thesis could be used in practice and how the proposed methodology works in the field.

Structure of the chapter
In this chapter, the following questions will be answered:
1. What steps should be taken before applying the 5-Step Methodology in practice?
2. How should the 5 steps be adapted to use them in practice?
3. How can the basic typologies from the Design Typologies Assessment Model be used in practice?

One of the objectives of this chapter is to understand the steps that must be taken before the 5-Step Methodology proposed in the thesis can be applied. Therefore, this chapter begins with an explanation of the preparatory steps. It shows that it is important to first understand the context-specific conditions of the area and to conduct analyses. It is also important to gather the needs and demands of the various stakeholders and include them in the analyses. Then the chapter will show how these analyses result in a context-specific adjusted Just City Framework, which is the starting point of the 5-Step Methodology. Subsequently, the chapter will show how the different steps can be implemented in practice and how the basic typologies from the Design Typologies Assessment Models on pages 178 to 181, can be used and applied. The chapter ends with a conclusion on how the methodology behaves in practice and what can be learned from it.

Figure A.3.1 shows the steps followed and explained in this appendix chapter. It illustrates the 5-Step Methodology, supplemented by the preparatory steps that must be applied to make the methodology applicable in practice. Also, it shows how step 5 works in practice. Throughout the chapter, an elaboration of this figure will be provided. The steps can be followed in the right-hand corner of each page.

The Sloterdijk Station Area
As mentioned, this chapter focuses on a specific area in the city of Amsterdam. The chosen area is the Sloterdijk Station Area in the west of the city. This area was chosen as a case study because the City of Amsterdam has designated it as a development area for the coming years (Gemeente Amsterdam, 2017) and it is an area with many challenges because it is surrounded by major infrastructure and it is very monofunctional. Figure A.3.2 shows the site, location and structure of the area.

Preparatory steps

01 Do analyses
Research the strength and weakness of the location and inventorize the needs and wishes of important stakeholders

02 Adjust the Just City Framework
Translate conclusions from context-specific analyses into planning & design principles and include them in the framework

5-step Methodology

1 Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2 Develop typologies for that design theme

Design Typologies

3 Assess the typologies with the Just City Framework as an assessment model

4 Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

Assessment model of suitable design solutions that contribute to the creation of a Just City

5 Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

Figure A.3.1: 5-Step Methodology in practice

Figure A.3.2: Introduction of the case-study location Sloterdijk

A.3 Using the methodology in practice
Analyses

Before the 5-Step Methodology can be applied in practice, it is important to adapt the Just City Framework to be applicable to the context-specific conditions of the site. Therefore, it is important to conduct extensive analysis and research on the strengths and challenges of the area, as well as the needs and desires of citizens and other stakeholders. The following pages show how this step can be taken. Although in reality this needs to be done more extensively, it provides insight into the preparatory steps to be taken before applying the methodology.

Data analyses

Figures A.3.3. and A.3.4 show examples of data analyses that can be done to analyze the location of a (re)development. For the Sloterdijk Station Area, it appears that there is a high share of non-western migrants (allecijfers.nl, 2023) and that citizens perceive the area as less safe and sufficient (Gemeente Amsterdam, 2022) than other areas in Amsterdam. This provides input for values and principles to be taken into account in the creation of the Just City Framework. For instance, it appears that additional attention should be paid to safety and attracting diverse populations to the area.

Spatial analyses

Photos A.3.1 and A.3.2 and the map on the following pages show spatial analyses conducted in the Sloterdijk Station Area. The photos of the area show the monofunctionality and lack of green space. It can also be seen that the area is car-dominated and paved and that there are infrastructural barriers. This can also be seen in the map on the following pages. The area contains boundaries created by infrastructure for trains and cars. This map also shows that the area does not follow the fine structure and morphology of the surrounding areas, threatening the human scale. Furthermore, it again shows that greenery and water are absent from the site and that existing large-scale green structures are disrupted.

Although there are problems in the area, there are also opportunities for development. Figure A.3.5 shows that the area is at the intersection of several surrounding areas and could therefore become an urban center, where people come together. The function of the station also creates opportunities for the area, as the station can become a placemaker and connector for different population groups.

Figure A.3.3: Population composition in Sloterdijk Station Area (based on allecijfers.nl, 2023)

Rate satisfaction with neighborhood Rate feeling of safety during nighthours

Figure A.3.4: Average ratings given by citizens in Sloterdijk for their satisfaction with the neighborhood and sense of safety (based on Gemeente Amsterdam, 2022)

Figure A.3.5: Location of Sloterdijk and connection with surrounding neighborhoods

Photo A.3.1: Impression of street in Sloterdijk Station Area

Photo A.3.2: Impression of infrastructural barriers in Sloterdijk Station Area

A.3 Using the methodology in practice
Analyses

From the data and spatial analyses, a series of conclusions emerge. These conclusions are illustrated alongside and show what problems and opportunities exist in the development area. These conclusions are context-specific and provide input for adjusting the Just City Framework to fit the location, which will be evident in the following pages.

Big infrastructural barriers in the area

Human scale is threatened

Existing green structures are disrupted

Monofunctional, unsafe and unlively

Infrastructure threatens health

Opportunity for area to become urban centre and station to become placemaker and connector

Barriers

Barriers

Water doesn't flow in

Barriers

Construction Area

Scale doesn't react to surrounding areas

Barriers

Barriers

0   100   300m

Figure A.3.6: Problem map Sloterdijk Station Area

Adjusting the Just City Framework

On the previous page, a series of conclusions derived from the analyses were presented. These conclusions may be translated into context-specific planning and design principles. These principles have to be incorporated into the Just City Framework to make it applicable to the specific location. This adapted Just City Framework can then be used in the 5-Step Methodology so that typologies can be assessed considering context-specific needs. This allows making the assessment as accurate as possible and aligned with the needs of local citizens.

A series of new planning principles flow from the conclusions. For instance, the disruption of green structures in the area calls for a new design principle, namely "Create connected green structures on both a big scale and a small scale" Similarly, the possibility of Sloterdijk as an urban core and the station as a placemaker creates new planning principles, namely "Allow Sloterdijk to develop as an urban core" and "Strengthen the identity of Sloterdijk station as a placemaker". Furthermore, the lack of green ask for the principle "Limit the amount of paved areas". These new principles are listed below:

- Create connected green structures on both a big scale and a small scale
- Allow Sloterdijk to develop as urban core
- Strengthen the identity of the Sloterdijk Station as placemaker
- Limit the amount of paved areas

Moreover, the conclusions highlight the importance of some of the existing planning and design principles in the context of a Just City. Some of these principles are listed below. Policymakers might choose to attach more importance to these principles than others when evaluating typologies..

- Develop safe places
- Protect the human scale in the design
- Develop sustainable and healthy places
- Give a voice to nature in the decision-making process

Finally, it is also important to include the needs of citizens in the Just City Framework. Therefore, their needs should be identified and incorporated into the framework as planning and design principles.

Figure A.3.8 shows what the adapted and context-specific Just City Framework for the Sloterdijk Station Area might look like. It shows how new principles have been added (marked with a "+") and others have been highlighted because they gain more importance. The speech bubbles illustrate the citizens' wishes. This framework is the starting point for the 5-Step Methodology and is the result of the preparatory steps that must be taken before the 5 steps can be put into practice.

Legend icons:
- Big infrastructural barriers in the area
- Human scale is threatened
- Existing green structures are disrupted
- Monofunctional, unsafe and unlively
- Infrastructure threatens health
- Opportunity for area to become urban centre station to become placemaker and connector

Figure A.3.7: Illustration of stakeholders that need to be included in the adjustment of the Just City Framework

Just City Framework

Figure A.3.8: Just City Framework, adjusted to context-specific demands for the Sloterdijk Station Area

A.3 Using the methodology in practice
Picking themes

Once the Just City Framework has been made context-specific and adapted to the needs of local citizens, the 5-Step Methodology can be applied. The following pages illustrate how the 5-Step Methodology behaves in practice and what adjustments need to be made to use it in the field. It also shows how the basic typologies from the Design Typologies Assessment Models of pages 178 to 181, can be used as indicators in practice.

Step 1: creating design themes

The first step of the 5-Step Methodology is to create a design theme that includes 1 or more Elements of Urban Form from the Just City Framework. The report has already explained 5 themes, namely:

- Mobility & Connectivity
- Functional Configuration
- Public Space Development
- Building Forms
- Development Process

In practice, these design themes can be chosen again. They are appropriate because together, they encompass all the Elements of Urban Form from the Just City Framework. Yet other design themes could also be chosen. For instance, in the Sloterdijk Station area, Green Structures and Ecology is an important theme because there is little green space in the area and green structures are disturbed. Therefore, it might be useful to create a new theme for this that includes other Elements of Urban Form.

In the rest of this appendix chapter, the existing design theme is used together with a new design theme. This shows that in practice it is indeed possible to choose both existing and a new design themes.

Steps 2&3 of the 5-Step Methodology in practice

After Step 1 of the 5-Step Methodology, in which design themes are chosen, Steps 2 and 3 can be performed. In these steps, typologies are developed and assessed, using the Just City Framework as an assessment model. The purpose of pages 256 to 275 is to illustrate how these steps work in practice. It explains how new typologies can be developed and their relationship to the basic typologies in the report. The pages show different scenarios. In the first scenario, the basic typologies from the Design Typologies Assessment Models can be applied without changing them. In the second scenario, the basic typologies are combined. In the third scenario, new typologies are created, but information can be gained from the existing ones. Finally, in the last scenario, completely new typologies are developed.

Preperatory steps

Figure A.3.9: 5-Step Methodology in practice

Figure A.3.10: Context-specific design theme Green Structures & Ecology

Mobility & Connectivity

Functional configuration

Figure A.3.11: Design theme Mobility & Connectivity

Figure A.3.12: Design theme Functional Configuration

Public Space Development

Building Forms

Figure A.3.13: Design theme Public Space Development

Figure A.3.13: Design theme Building Forms

Development Process

Figure A.3.14: Design theme Development Process

A.3 Using the methodology in practice
Development of typologies

Figure A.3.15: Design theme Mobility & Connectivity

Scenario 1: Basic typologies are directly applicable

One of the problems arising from the (spatial) analyses in the Sloterdijk Station Area are the large infrastructural barriers that exist. These barriers limit Mobility and Connectivity in the area, so it is useful to research typologies that limit infrastructural barriers. Here, a relationship can be established with the basic typologies from the report. Indeed, the Design Typologies Assessment Model showed 4 typologies for mitigating infrastructural barriers. In this case, these 4 typologies can be directly applied to the Sloterdijk Station Area. This shows one of the scenarios in practice, namely the scenario where the basic typologies can be directly applied to a site.

Below, the 4 typologies are shown and, in addition, their influence on the Sloterdijk Station Area is explained. On the next page the assessment is performed and here an explanation is given of the relationship between the basic typologies from the Assessment Models and their application in practice.

Figure A.3.16 shows the 4 basic typologies from the Design Typologies Assessment Model about limiting infrastructural barriers. These typologies consist of a strategy of hiding, accepting, embedding and rerouting. On page 257, these typologies are directly applied to the Sloterdijk Station Area, resulting in 5 possible design solutions.

Figure A.3.16: Basic typologies for limiting infrastructural barriers

Typology 1: Hiding
The map to the right shows what the Sloterdijk Station Area would look like if the first typology (hiding) were applied. The train tracks can be tunneled and new development can take place above it. This allows for a better connection with the areas to the south, but there are also disadvantages. For example, the major infrastructural node remains and there is still an infrastructural barrier to the north created by the highway. It is also an expensive operation.

Figure A.3.17: Strategy "hiding" applied on Sloterdijk Station Area

Typology 2: Accepting
Figure A.3.18 shows how the second typology can be worked out in practice. In this typology, infrastructural barriers are accepted and connections are made over them. In this case, the train tracks are covered over and a park is created on top. While this does not create a structure strong enough for new development on top of the tracks, it does help to create new connections and more vibrant urban areas. However, there is still an infrastructural barrier to the north and the infrastructural node in the middle remains.

Figure A.3.18: Strategy "accepting" applied on Sloterdijk Station Area

Typology 3: Embedding
In typology 3, the infrastructural barriers are embedded in the urban landscape. Under and over the tracks, connections are made and the tracks are used as placemakers. The map shows that although the train tracks become part of the landscape, the infrastructural barriers remain on a large scale. The major infrastructural node also remains.
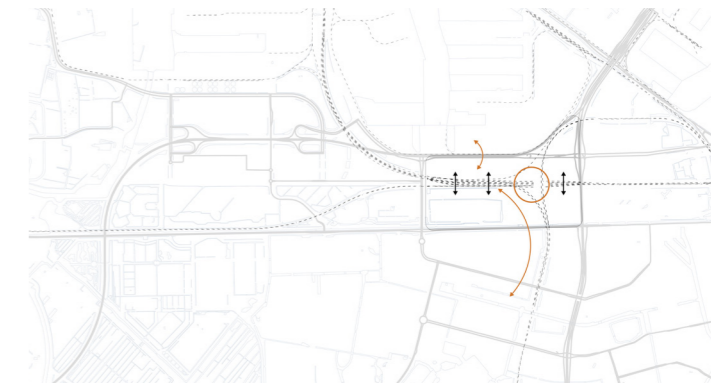

Figure A.3.19: Strategy "embedding" applied on Sloterdijk Station Area

Typology 4A: Combining Tain tracks with A5
For the fourth typology, rerouting, there are two options for the Sloterdijk Station Area. In the first option, the train tracks are combined with the A5. This typology creates open space and a continuous landscape to the south of the area. This creates opportunities for creating an urban core and green structures. Yet it is an expensive intervention.
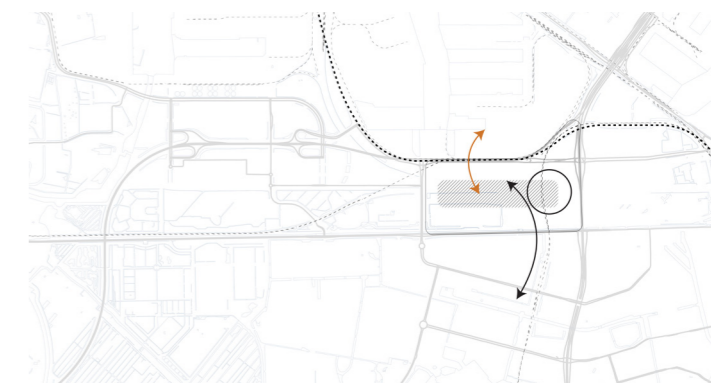

Figure A.3.20a: Strategy "rerouting" applied on Sloterdijk Station Area

Typology 4B: Combining A5 with Train tracks
The other typology for rerouting in the Sloterdijk Station Area is the typology of combining the A5 with the train tracks. This creates a larger infrastructural barrier through the area, but on the other hand, it creates more connection to new urban developments in the north.
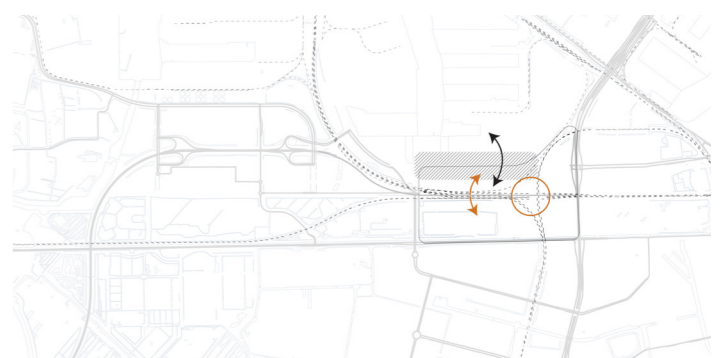

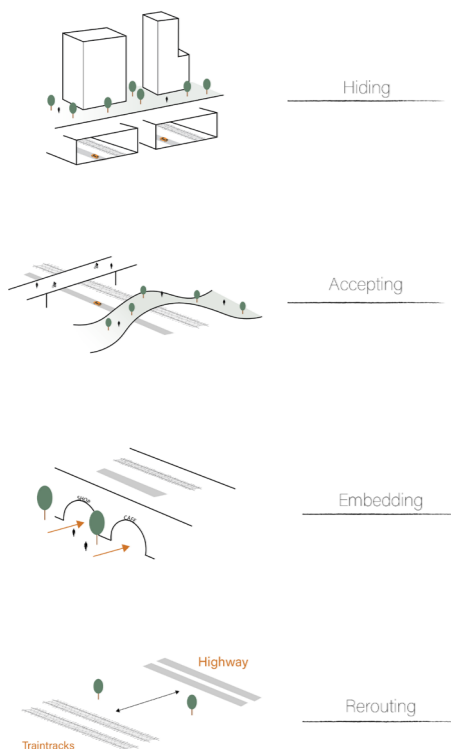**Figure A.3.20b:** Strategy "rerouting" applied on Sloterdijk Station Area

A.3 Using the methodology in practice
Development of typologies

A.3 Using the methodology in practice
Development of typologies

Figure A.3.23: Design theme Public Space Development

Scenario 2: Basic typologies are combined

The second design theme for which typologies should be developed is the theme of Public Space Development. Since the public space in Sloterdijk lacks green and quality, a new strategy must be developed for development. In this case, a new scenario is used, combining the basic typologies from the Design Typologies Assessment Model. In this case, the typologies for types of public spaces are combined with the typologies for reducing infrastructural barriers. In this case, 3 combined typologies are developed, impressions of which are given on the page to the right. In the first typology, a combination of the strategy "accepting" and the typology "public space around infrastructural node" was chosen. In the second typology, a combination of the strategy "embedding" and the typology "public space around urban functions" was chosen. Finally, there is a typology consisting of a combination of the strategy "hiding" and "public space around green structures."

The following pages review the typologies and draw a conclusion about the relationship between the basic typologies and the 5-Step Methodology in practice.

Typology 1

Accepting + Public space around infrastructural node

Typology 2

Embedding + Public space around urban functions

Figure A.3.24 shows the three typologies. They are all derived from a combination of basic typologies from the Design Typologies Assessment Models. On the next pages, illustrations are provided showing what the combinations look like in Sloterdijk. Subsequently, the typologies are assessed, using the adjusted Just City Framework as an assessment model.

Typology 3

Hiding + Public space around urban green

Figure A.3.24: Typologies for public space development in Sloterdijk Station Area, as combination of basic typologies

Introduction of the location

Photo A.3.3 shows an impression of a specific location in the Sloterdijk Station Area. It illustrates a public space that is surrounded by infrastructure and lacks quality and green. This place is the starting point from which new typologies are designed. These typologies are explained below. The different typologies combine the basic typologies for limiting infrastructural barriers and types of public spaces.

Photo A.3.3: Example of public space in Sloterdijk Station Area

Typology 1: Accepting + a public space around infrastructural node

The first typology combines the strategy of "accepting" infrastructural barriers with the "public spaces around infrastructural nodes" typology. In this strategy, the created public space does not differ much from the existing situation. Small interventions are made, for example, attracting small-scale functions (the food truck) and placing a bus stop. Besides these interventions, the place remains unprogrammed and unplanned. The interventions are not too expensive and protect the existing structure. Still, the added quality is limited.

Figure A.3.25: Impression public space in Sloterdijk Station Area when typology 1 is applied

Typology 2: Embedding + a public space around urban functions

The second typology combines the strategy of embedding infrastructural barriers with the creation of public spaces around urban functions. The image shows that functions are placed under infrastructure, creating a lively place. This strategy contributes to the creation of urban quality. On the other hand, it is an expensive intervention and infrastructural barriers remain on a large scale.

Figure A.3.26: Impression public space in Sloterdijk Station Area when typology 2 is applied

Typology 3: Hiding + a public space around nature

In the third typology, infrastructural barriers are hidden and a public space with nature is created. Here, a continuous landscape is developed and the park adds quality to the public space. It is a costly intervention, but at the same time, it contributes to many other principles for creating a Just City.

Figure A.3.27: Impression public space in Sloterdijk Station Area when typology 3 is applied

A.3 Using the methodology in practice
Development of typologies

Assessment

The assessment table to the right shows how the different typologies from the previous page score on the various principles for creating a Just City. This uses the modified Just City Framework from page 253 and includes the additional planning and design principles.

Conclusion

As explained, the design typologies on the previous pages are a combination of basic typologies from the Design Typologies Assessment Models on pages 178 to 181. It can be seen from Tables A.3.3, A.3.4 and A.3.5 that the assessment of the typologies differ from the basic typologies. However, since the newly created typologies are derived from the basic typologies, the Design Typologies Assessment Models provide a general understanding of the added quality and contribution to the creation of a Just City environment. Thus, in the second scenario, it can be concluded that a new assessment is needed to understand the added contribution, but the basic typologies serve as a quick indicator of added value.

Element of Urban Form	Planning or Design Principle	Typology 1	Typology 2	Typology 3
Continuity & Legibility	Develop routing of accidentally meeting	1	2	2
	Create connected green structures on both a big scale and a small scale	0	0	2
	Create (functional) cores and routes leading there	0	1	1
	Limit (infrastructural) barriers in the area	-1	1	2
Character	Develop places of belonging	0	2	2
	Develop places of inspiration & creativity	1	2	2
	Develop places of spontaneity	1	1	1
	Create coherence between citizens	1	2	2
	Develop places of identity	1	2	2
Enclosure	Develop safe places	-1	2	2
	Create coherence and work on community-building	1	2	2
	Develop social safety	-1	2	2
	Protect the human scale in the design	-1	1	1
Activity & Use	Develop places that serve and stimulate different uses	1	1	2
	Develop cores where different uses come together	0	2	2
	Facilitate community-building and participation in activity	1	2	2
	Develop places of spontaneous use and interaction	1	1	1
	Allow Sloterdijk to develop as urban core	0	1	1
	Develop unprogrammed places	1	1	1
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	-1	0	2
	Develop accessible and connecting places, with special attention to slow traffic	1	1	2
	Develop sustainable and healthy places	-1	0	2
	Develop nature-based public places and create a right balance between building density and public space	-1	0	2
Mixture (Diversity)	Develop an environment that creates tolerance and coherence	1	2	2
Movement	Develop walkable and bikeable areas	1	0	2
	Create connections that serve a bigger area	0	0	2
	Create cores and routing towards them	0	1	1
	Limit the ammount of pavement in the area	0	0	2
	Develop continuous landscapes without barriers	-1	0	2
	Create movement flows that stimulate interaction and meeting	1	1	2
(Climate) Adaptation	Develop sustainably and climate adaptive	-1	0	2
	Develop nature-based	-1	0	2
	Create connected green structures on both a big scale and a small scale	0	0	2
	Give a voice to nature in the decision-making process	0	0	1
Development Process	Place users centrally in the decision-making	1	1	2
	Protect those without a voice during the development process	-1	0	2
	Allow everyone to benefit from public investments & develop cost-efficiently	2	-1	-2
	Scoring	**4**	**33**	**64**

Table A.3.3: Assessment typologies public space development for Sloterdijk Station Area

Figure A.3.28: Assessment model for public space development in Sloterdijk Station Area

Element of Urban Form	Design Principle	Typology 1 Public spaces around infrastructural nodes	Typology 2 Public spaces around green infrastructure	Typology 3 Public spaces around functions	Typology 4 Public spaces around housing
Continuity & Legibility	Develop routing of accidentally meeting	2	2	1	1
	Create landmarks for orientation & do placemaking	2	0	1	0
	Create (functional) cores and routes leading there	2	0	0	0
	Limit (infrastructural) barriers in the area	1	0	0	0
Character	Develop places of belonging	1	1	2	2
	Develop places of spontaneity	2	2	1	1
	Create coherence between citizens	1	1	1	2
	Develop places of identity	1	1	1	1
Enclosure	Develop safe places	-1	0	0	0
	Create coherence and work on community-building	1	1	1	2
	Develop social safety	1	1	1	2
	Protect the human scale in the design	1	0	0	1
Activity & Use	Develop places that serve and stimulate different uses	2	1	1	1
	Develop cores where different uses come together	2	1	2	1
	Facilitate community-building and participation in activity	1	1	1	2
	Develop places of spontaneous use and interaction	2	2	1	1
	Create access to necessities for all	1	1	2	1
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	1	2	1	1
	Develop places of character but with attention to own interpretation	1	1	1	1
	Develop sustainable and healthy places	1	2	1	1
	Develop nature-based public places and create a right balance between building density and public space	1	2	1	1
Mixture (Diversity)	Develop an environment that creates tolerance and coherence	1	1	1	2
	Create and stimulate job opportunities for all and economic progress	1	1	2	1
Movement	Develop walkable and bikeable areas	2	1	1	1
	Create connections that serve a bigger area	2	1	2	1
	Create cores and routing towards them	2	1	2	1
	Create movement flows that stimulate interaction and meeting	2	1	1	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1	2	1	1
	Develop nature-based	1	2	1	1
	Stimulate human behaviour that protects nature	0	1	0	0
	Give a voice to nature in the decision-making process	0	2	0	0
Development Process	Place users centrally in the decision-making	2	2	2	2
	Scoring	**40**	**37**	**36**	**33**

Table A.3.4: Assessment basic typologies for public spaces

Element of Urban Form	Design Principle	Typology 1 Hiding	Typology 2 Accepting	Typology 3 Embedding	Typology 4 Rerouting & Combining
Continuity & Legibility	Develop routing of accidentally meeting	1	-1	1	1
	Create (functional) cores and routes leading there	2	-1	-1	1
	Limit (infrastructural) barriers in the area	2	-1	-1	1
Character	Develop places of belonging	1	0	2	1
	Develop places of inspiration & creativity	0	0	2	0
	Create coherence between citizens	1	0	2	1
	Pay attention to 'soft' planning and temporary urbanism	0	0	1	0
	Develop places of identity	1	0	2	1
Enclosure	Develop safe places	1	-1	1	1
	Create coherence and work on community-building	1	0	2	1
	Protect the human scale in the design	1	-1	1	1
Activity & Use	Develop places that serve and stimulate different uses	1	0	2	1
	Develop cores where different uses come together	2	-1	1	1
	Develop mixed-use and protect the development of diverse housing & functions	2	0	0	1
	Develop places of spontaneous use and interaction	0	0	1	0
	Develop unprogrammed places	0	0	1	0
	Create access to necessities for all	2	-1	1	1
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	2	-2	-2	-1
	Develop accessible and connecting places, with special attention to slow traffic and public transport	2	-1	-1	1
	Develop sustainable and healthy places	2	-2	-2	-1
	Develop nature-based public places and create a right balance between building density and public space	1	-2	-2	-1
Mixture (Diversity)	Develop mixed-use and diverse housing and functions	2	0	0	1
	Create social & spatial adaptability by doing temporary development	0	0	1	0
	Attract different population groups to the area	2	0	0	1
	Leave space for small-scale initiatives during the development process	-2	1	1	-2
Movement	Develop walkable and bikeable areas	2	-1	-1	1
	Create connections that serve a bigger area	2	-1	-1	1
	Create cores and routing towards them	2	-1	-1	1
	Develop continuous landscapes without barriers	2	-1	-1	1
	Create safe movement	2	-1	-1	1
	Create movement flows that stimulate interaction and meeting	0	0	1	0
(Climate) Adaptation	Develop sustainably and climate adaptive	2	-2	-2	-1
	Develop nature-based	1	-2	-2	-1
	Develop efficient building and transport	2	0	0	1
	Give a voice to nature in the decision-making process	1	-2	-2	-1
Development Process	Allow bottom-up development	-2	1	2	-2
	Place users centrally in the decision-making	1	0	1	0
	Pay attention to temporary urbanism	-1	0	1	-1
	Bring opportunities for citizens to protest and debate	-1	1	1	-1
	Give public actors bigger powers than private actors	-1	2	2	-1
	Allow everyone to benefit from public investments	-1	1	1	-1
	Scoring	**38**	**-19**	**10**	**8**

Table A.3.5: Assessment basic typologies for limiting infrastructural barriers

Figures A.3.29 & A.3.30: Assessment model of basic typologies for public spaces & limiting infrastructural barriers

Scoring Legend
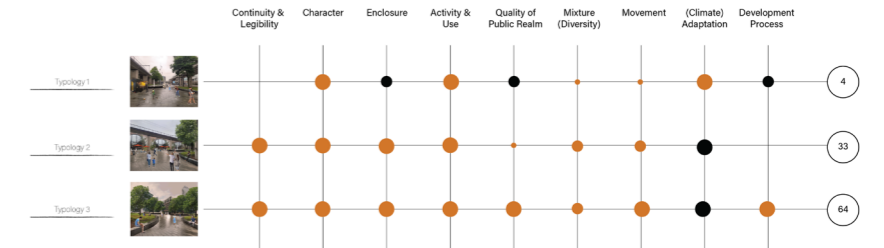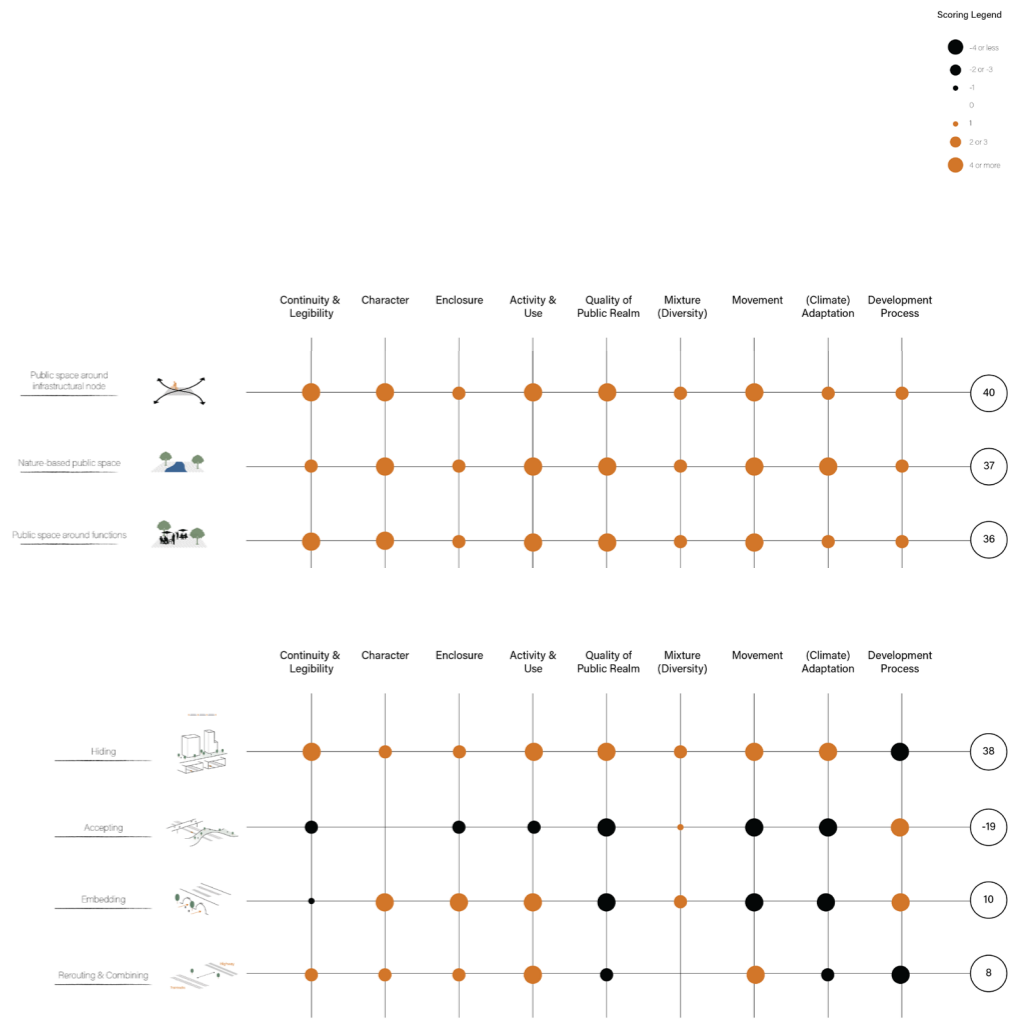
A.3 Using the methodology in practice
Development of typologies

Scenario 3: Creation of new typologies, based on existing ones
As shown in the analysis phase, the Sloterdijk Station Area is highly paved and car-dominated. To change this in the future, it is important to develop different typologies for the role of the car in development. For example, one could choose to give the car the same importance as it already has today or one could choose to give priority to slow traffic. Furthermore, one could also opt for a completely car-free area. These typologies are elaborated below. Their impact on urban quality is examined and an assessment is given on the following pages, using the Just City Framework as an assessment model. Here, a relationship is established between the new typologies and the basic typologies from the Design Typologies Assessment Models and it is shown how the basic typologies can be used as references.

Figure A.3.31: Design theme Mobility & Connectivity

Typology 1:
Car as important mode of transport

Typology 2:
Car is allowed, but focus on slow traffic

Typology 3:
Car-free area

Figure A.3.32: Typologies for role of the car

In figure A.3.32 the different typologies are shown. These are further explained on the next pages. An image of a street in the Sloterdijk Station area is shown below. The explanation of the typologies uses this image and illustrates how the streetscape would change if the particular typology were applied. This gives insight into the urban quality that each typology brings.

Photo A.3.4: Example of street in Sloterdijk Station Area

Typology 1: Car as important mode of transport
In the first typology, the car remains as important as it is today. The map shows that major roads will remain and, therefore, major infrastructural barriers will remain. Furthermore, the picture shows that the number of cars on the streets will increase and that slow traffic has a low priority. These values threaten the creation of a Just City in multiple ways.

Figure A.3.33: Map of Sloterdijk Station Area when typology 1 is applied

Figure A.3.34: Impression street in Sloterdijk Station Area when typology 1 is applied

Typology 2: Car is allowed, but focus on slow traffic
In the second typology, cars are allowed on the major roads, but they no longer have the right of way. The major roads remain and thus infrastructural barriers persist. Yet, the streetscape changes. As slow traffic is given priority, the streets will become safer and more pleasant. This will bring more quality and vibrancy to the streets.

Figure A.3.35: Map of Sloterdijk Station Area when typology 2 is applied

Figure A.3.36: Impression street in Sloterdijk Station Area when typology 2 is applied

A.3 Using the methodology in practice
Development of typologies

Typology 3: Car-free area
In the last typology, the area becomes car-free. Major infrastructure barriers will be removed and the roads in the area will be designed entirely for slow traffic. As the impression also shows, this will lead to livable, safe and vibrant streets. It will also contribute to better air quality and healthy urban areas.

Figure A.3.37: Map of Sloterdijk Station Area when typology 3 is applied

Figure A.3.38: Impression street in Sloterdijk Station Area when typology 3 is applied
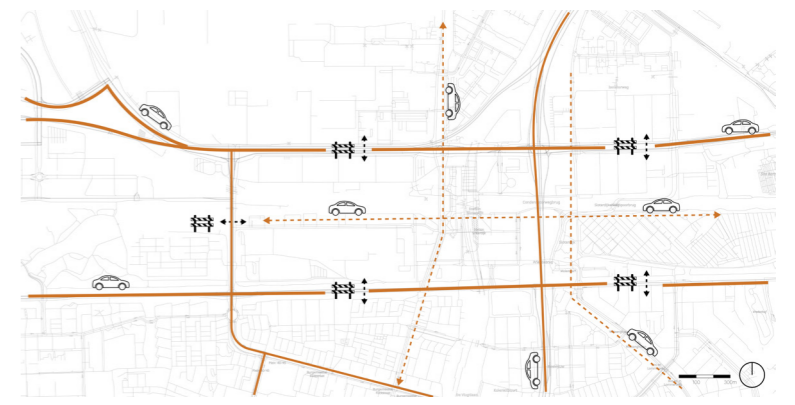
A.3 Using the methodology in practice
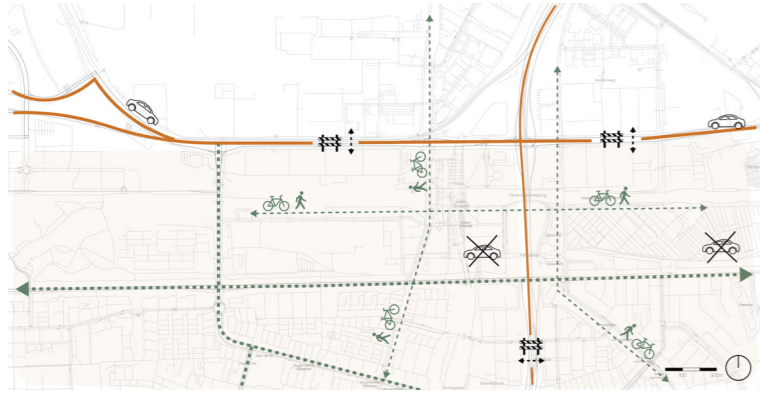## Development of typologies

Assessment
Table A.3.6 shows the assessment of the typologies created in previous pages. Here, the adapted Just City Framework from page 253 is used as an assessment model.

Conclusion
The typologies created are strongly related to some basic typologies from the Design Typologies Assessment Models on pages 178 to 181. This is because the typologies have a strong influence on the type of streets created in the area, and therefore the basic street typologies can be used as a comparison. Typology 1 is strongly related to the "car-oriented street," typology 2 is related to the "bicycle-oriented street," and typology 3 can be linked to the "shared street." Tables A.3.6 and A.3.7 show that the assessment in practice differs from the assessment of the basic typologies. Nevertheless, the basic typologies make it possible to quickly understand the added quality by applying these typologies. This shows how the basic typologies add quickly available information during real-world processes. However, to obtain exact information, it is always important to perform the assessment again.

Element of Urban Form	Planning or Design Principle	Typology 1	Typology 2	Typology 3
Continuity & Legibility	Develop routing of accidentally meeting	-2	1	2
	Create connected green structures on both a big scale and a small scale	-2	0	1
	Limit (infrastructural) barriers in the area	-2	0	2
Character	Develop places of belonging	-2	1	2
	Strengthen the identity of Sloterdijk Train Station as placemaker	-2	1	2
	Develop places of inspiration & creativity	-2	1	2
	Develop places of spontaneity	-2	1	2
	Pay attention to 'soft' planning and temporary urbanism	-2	1	2
	Develop places of identity	-2	1	2
Enclosure	Develop safe places	-2	1	1
	Protect the human scale in the design	-2	2	2
Activity & Use	Develop places that serve and stimulate different uses	-2	1	2
	Facilitate community-building and participation in activity	-2	1	2
	Develop places of spontaneous use and interaction	-2	1	2
	Develop unprogrammed places	-2	0	2
	Allow users to participate in the development of places	-2	1	1
	Create access to necessities for all	-2	2	2
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	-2	1	2
	Develop places of character but with attention to own interpretation	-2	2	2
	Develop accessible and connecting places, with special attention to slow traffic	-2	1	2
	Develop sustainable and healthy places	-2	2	2
Mixture (Diversity)	Develop an environment that creates tolerance and coherence	-2	2	2
Movement	Develop walkable and bikeable areas	-2	1	2
	Create connections that serve a bigger area	-2	2	2
	Invest in public transport connections and demotivate car-use	-2	1	2
	Limit the ammount of pavement in the area	-2	1	2
	Develop continuous landscapes without barriers	-2	1	2
	Create safe movement	-2	1	1
	Create movement flows that stimulate interaction and meeting	-2	1	2
(Climate) Adaptation	Develop sustainably and climate adaptive	-2	1	2
	Develop nature-based	-2	1	2
	Create connected green structures on both a big scale and a small scale	-2	0	1
	Develop efficient building and transport	-2	1	1
	Give a voice to nature in the decision-making process	-2	1	2
Development Process	Place users centrally in the decision-making	-2	1	2
	Protect those without a voice during the development process	-2	1	2
	Scoring	-72	38	66

Table A.3.6: Assessment typologies role of the car for Sloterdijk Station Area
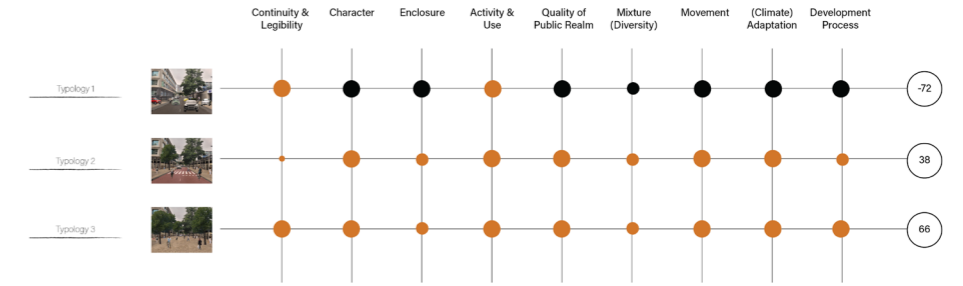

Figure A.3.39: Assessment model for roles of the car in Sloterdijk Station Area

Element of Urban Form	Design Principle	Typology 1 Shared Street	Typology 2 Pedestrian Street	Typology 3 Bike-oriented street	Typology 4 Car-oriented Street	Typology 5 Public transport oriented streets
Continuity & Legibility	Develop routing of accidentally meeting	1	1	0	0	0
	Create (functional) cores and routes leading there	1	1	2	1	2
	Limit (infrastructural) barriers in the area	2	2	1	-2	-1
Character	Develop places of belonging	2	2	1	0	1
	Develop places of inspiration & creativity	2	2	1	0	1
	Develop places of spontaneity	2	2	1	0	1
	Create coherence between citizens	2	2	0	0	1
	Develop places of identity	2	2	1	0	1
Enclosure	Develop safe places	0	2	1	0	1
	Create coherence and work on community-building	2	2	1	0	1
	Develop social safety	1	1	1	0	1
	Protect the human scale in the design	2	2	1	-1	0
Activity & Use	Develop places that serve and stimulate different uses	2	2	1	-1	1
	Develop cores where different uses come together	1	1	2	1	2
	Facilitate community-building and participation in activity	2	2	0	0	1
	Develop places of spontaneous use and interaction	2	2	1	0	1
	Develop unprogrammed places	1	1	0	0	1
	Allow users to participate in the development of places	2	2	0	0	1
	Create access to necessities for all	1	1	2	1	2
Quality of the Public Realm	Develop qualitative and healthy places, mentally & physically	1	1	1	-1	1
	Develop places of character but with attention to own interpretation	2	1	0	0	1
	Develop accessible and connecting places, with special attention to slow traffic and public transport	1	2	2	1	2
	Develop an environment that creates tolerance and coherence	1	1	0	0	1
Movement	Develop walkable and bikeable areas	1	2	2	-1	2
	Create connections that serve a bigger area	0	0	1	2	2
	Create cores and routing towards them	1	1	2	1	2
	Invest in public transport connections and demotivate car-use	1	1	1	-2	2
	Develop continuous landscapes without barriers	2	2	1	-2	-1
	Create safe movement	0	2	1	1	1
	Create movement flows that stimulate interaction and meeting	2	2	1	0	1
(Climate) Adaptation	Develop sustainably and climate adaptive	1	1	2	-2	2
	Develop efficient building and transport	-2	-2	2	2	2
	Stimulate human behaviour that protects nature	1	1	1	-2	2
	Give a voice to nature in the decision-making process	1	1	2	2	2
	Scoring	43	48	35	-6	40

Table A.3.7: Assessment basic street typologies

Figure A.3.40: Assessment model of basic street typologies

Scoring Legend
- -4 or less
- -2 or -3
- -1
- 0
- 1
- 2 or 3
- 4 or more

Development of typologies

Green Structures & Ecology

Figure A.3.41: Design theme "Green Structures & Ecology"

Scenario 4: Creation of new typologies

The basic typologies, explained in the thesis, cannot always be used when it comes to context-specific designs. If the basic typologies are not applicable, it is necessary to create new typologies and perform a completely new assessment. In the process, new design themes may also be created.

Although there are many examples of design themes in the Sloterdijk Station Area that relate to the basic typologies, there are also examples of topics that do not cover the basic typologies. One example is the design theme Green Structures and Ecology. Large green structures are being disturbed in the area and the question arises as to how this should be resolved. For example, there is a large area currently covered with sports fields. Different typologies can be created for this area in which different possibilities are explored. For instance, one can choose to keep the sports fields or to replace them by ecological parks. There is also the possibility of creating new functions in the area. In the following, the three typologies for what to do with the sports fields are explained and an assessment is presented on the following pages.

In summary, these pages provide an example of a situation where the basic typologies from this report cannot be used and new typologies must be developed. In this case, the typologies focus on the urban area marked in figure A.3.42. Three typologies are developed, namely the typology in which the sports fields remain, the typology in which the original ecological green structure is restored, and the typology in which the site is used for new urban functions.

Figure A.3.42: Illustration of location sports fields in Sloterdijk Station Area

Typology 1: Sports fields remain

In the first typology, the area remains as it is now. This keeps the identity of the place the same and stimulates the sports function. However, the ecological value of the sports fields is not high, so the large-scale green structure remains disturbed. Other solutions must be found to restore the ecological value in the area.

Figure A.3.43: Illustration of typology 1 in Sloterdijk Station Area

Typology 2: Restoring the ecological green structure

In the second typology, the large-scale ecological green structure of the area is restored. This means replacing the sports fields with nature. This contributes to many planning and design principles for a Just City. Nevertheless, it also takes up a lot of space that cannot be used for other functions.

Figure A.3.44: Illustration of typology 2 in Sloterdijk Station Area

Typology 3: Using the area for new development

In the last typology, the area is redeveloped to create new urban functions. In this case, the sports fields are replaced by buildings. This helps to create affordable and accessible housing and functions. However, it is questionable whether this solution leads to the restoration of the green structure in the area. Special attention should be paid to ecological value when this typology is chosen.

Figure A.3.45: Illustration of typology 3 in Sloterdijk Station Area

A.3 Using the methodology in practice
Development of typologies

Assessment
Table A.3.8 shows the assessments for the typologies on the previous pages, using the adapted Just City Framework from page 253 as the assessment model.

Conclusion
Not in all cases is it possible to use the basic typologies in the Design Typologies Assessment Models from pages 178 to 181. In this example, it was found that it is sometimes necessary to create a new design theme with new typologies and an unique assessment.

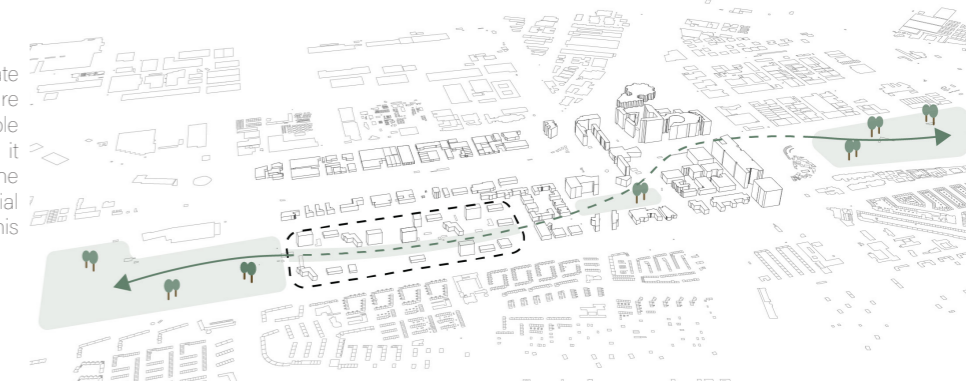| Element of Urban Form	Planning or Design Principle	Typology 1	Typology 2	Typology 3
	Develop routing of accidentally meeting	0	2	1
Continuity & Legibility	Create connected green structures on both a big scale and a small scale	1	1	2
	Create (functional) cores and routes leading there	0	1	2
Character	Develop places of identity	1	2	2
	Develop places that serve and stimulate different uses	1	2	1
	Develop cores where different uses come together	0	1	2
	Facilitate community-building and participation in activity	0	2	1
Activity & Use	Develop mixed-use and protect the development of diverse housing & functions	0	0	2
	Develop places of spontaneous use and interaction	1	2	1
	Allow Sloterdijk to develop as urban core	0	1	2
	Develop unprogrammed places	0	2	1
	Allow a diverse economy to grow and create a diversity of jobs	0	0	1
	Develop qualitative and healthy places, mentally & physically	1	2	0
Quality of the Public Realm	Develop places of character but with attention to own interpretation	0	2	2
	Develop sustainable and healthy places	1	2	1
	Develop nature-based public places and create a right balance between building density and public space	1	2	1
	Develop mixed-use and diverse housing and functions	0	0	2
Mixture (Diversity)	Create access to good housing for everyone	0	0	2
	Attract different population groups to the area	0	0	2
	Create a fair distribution of resources	0	1	1
Movement	Limit the ammount of pavement in the area	1	1	-1
	Create movement flows that stimulate interaction and meeting	-1	1	1
	Develop sustainably and climate adaptive	1	2	1
	Develop nature-based	1	2	1
(Climate) Adaptation	Create connected green structures on both a big scale and a small scale	1	2	1
	Develop sustainable and comfortable buildings that create good living and working conditions	0	0	1
	Give a voice to nature in the decision-making process	1	2	1
Development Process	Protect those without a voice during the development process	1	2	1
	Scoring	12	37	35

Table A.3.8: Assessment typologies redevelopment sport fields location for Sloterdijk Station Area
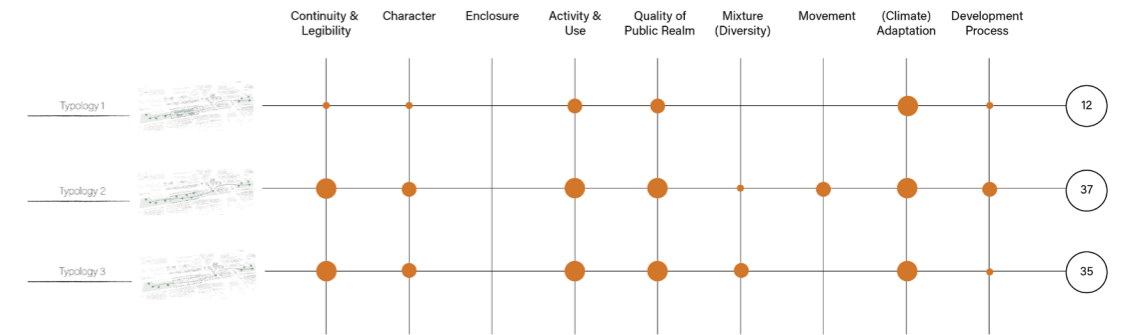

Figure A.3.46: Assessment model for typologies redevelopment sport fields in Sloterdijk Station Area

A.3 Using the methodology in practice
Integration

Step 5: Integration
The final step of the 5-Step Methodology is to integrate the most suitable and high-scoring design solutions into a spatial design. Although this sounds as an easy step, it is not so simple. This is because the different typologies influence each other's assessments. For example, choosing the typology "hiding infrastructural barriers" creates more opportunities for green structures than choosing "accepting infrastructural barriers." In this example, the assessment of typologies for different green structures depends on the choice of typologies of limiting infrastructural barriers. In conclusion, all typologies are interrelated and assessments depend on the other choices made in the area.

The mutual complexity explained above makes step 5 of the Methodology challenging. In this step, high-scoring typologies must be integrated in such a way that they positively influence each other's assessment. In this step, it is important to continue to use urban design as a strong tool, to explore the potential of the area and the possibilities of integrating typologies in a strengthening way.

Scorings as discussion-starter
Since the different urban design typologies are interrelated and influence each other, it is important to note that the scores of each typology should not be seen as absolute numbers and fixed assessments. In Step 5 of the Methodology, it is important to understand the scores as flexible and to see them as input for further discussion. The participation of various stakeholders should not be limited to steps 1 to 4 of the 5-Step Methodology, but especially in step 5, it is important to continue to discuss how best to integrate the highest-scoring typologies.

Further research
The complexity of integrating the different typologies in step 5 of the 5-Step Methodology requires further research. In the future, it is recommended to look for strategies of how to do the integration best and how to involve citizens and other stakeholders. This can teach us more about how the 5-Step Methodology should work in practice.

Conclusion
Above is explained what needs to be done to implement step 5 of the 5-Step Methodology in practice. In this step, it is necessary to keep different stakeholders involved in the integration process and to use the scores from the assessment as input for discussion and further exploration. Figure A.3.47 illustrates this visually. It shows the end result of this chapter, namely an illustration of how the 5-Step Methodology should be adjusted to make it applicable for context-specific urban developments.

Preperatory steps

0.1   Do analyses

Research the strength and weaknesses of the location and inventorize the needs and wishes of important stakeholders

0.2   Adjust the Just City Framework

Translate conclusions from context-specific analyses into planning & design principles and include them in the framework

5-step Methodology

1   Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

2   Develop typologies for that design theme

Design Typologies

3   Assess the typologies with the Just City Framework as an assessment model

4   Develop an assessment model that illustrates the scorings of the typologies and shows the most suitable solutions for this design theme.

Assessment model of suitable design solutions that contribute to the creation of a Just City

5   Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

**Keep exploring opportunities in discussion with stakeholders
Scorings as input for the discussion**

5   Integrate the highest-scoring typologies into an optimized design that contributes to the development of a Just City

**Keep exploring opportunities in discussion with stakeholders
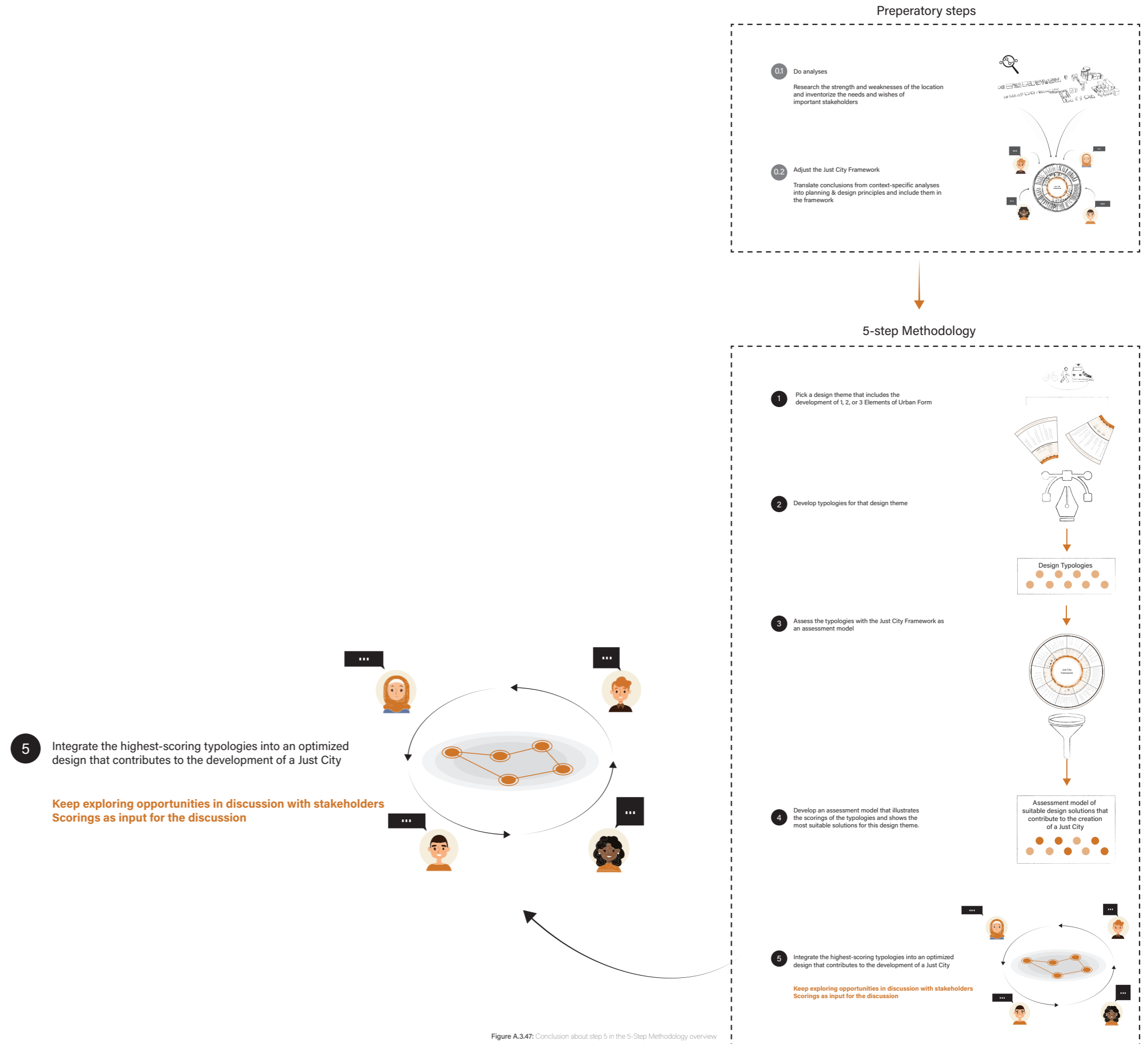Scorings as input for the discussion**

Figure A.3.47: Conclusion about step 5 in the 5-Step Methodology overview

A.3 Using the methodology in practice
Conclusion

This chapter has shown how the 5-Step Methodology of this thesis works in practice, using the example of a new development area in Amsterdam: the Sloterdijk Station Area. It illustrated the preparatory steps that must be taken to make the Just City Framework usable for context-specific conditions. These steps consisted of:

1.   Do analyses
Research the strength and weaknesses of the location and inventorize the needs and wishes of important stakeholders

2.   Adjust the Just City Framework
Translate conclusions from context-specific analyses into planning & design principles and include them in the framework

Subsequently, steps 1 to 4 were applied to the Sloterdijk Station Area. This involved examining how the creation and assessment of typologies functions in practice and the role of the basic typologies from the Design Typologies Assessment Models (pages 178 to 181). It was investigated how the basic typologies can be used in a context-specific situation. In doing so, 4 scenarios became apparent, namely:

1. The basic typologies are directly applicable
In the first scenario, the basic typologies from the Design Typologies Assessment Models could be applied directly to the site. Although the assessments varied slightly, the scoring of the basic typologies provided a good estimate of the added quality in the area.

2. The basic typologies are being combined
For other design choices in the Sloterdijk Station Area, the basic typologies could be combined. Here, typologies concerning Mobility & Connectivity were combined with typologies concerning the theme of Public Space Development. Although the assessment differed significantly from the assessment of the basic typologies, the assessment of the basic typologies could be used as a quick indicator of added quality in the area.

3. Creation of new typologies, but information can be gained from the basic typologies
In the third example, new context-specific typologies were developed for the Sloterdijk Station Area. It became apparent that even though these are new typologies, the information from the basic typologies could be used to create an idea of how the different typologies do or do not contribute to creating a Just City. This showed that the basic typologies are still valuable even if new typologies need to be developed.

4. Creation of new typologies
Finally, there was also a scenario in which the basic typologies were not useful. New typologies had to be developed to explore the best solutions. This scenario demonstrated that it is always important to investigate the need to develop new typologies.

After applying the first four steps of the Methodology, step 5 takes place. In this step, one tries to integrate the most suitable solutions into the spatial design. The examples in this Appendix chapter have shown that this step is not as simple as it sounds. This is because typologies are always interrelated and influenced by each other, and the assessment depends on other choices made. Therefore, this experiment has shown that integration in step 5 should always be done with the participation of different stakeholders. For further research, it is recommended to investigate how step 5 can best be done in practice.

Figure A.3.48 shows the result of the experiment in which the 5-Step Methodology is applied in reality. It shows exactly how to adapt the 5 steps to make it applicable to a context-specific location. Moreover, the different scenarios teach us how the basic typologies from the report can be used in the field.
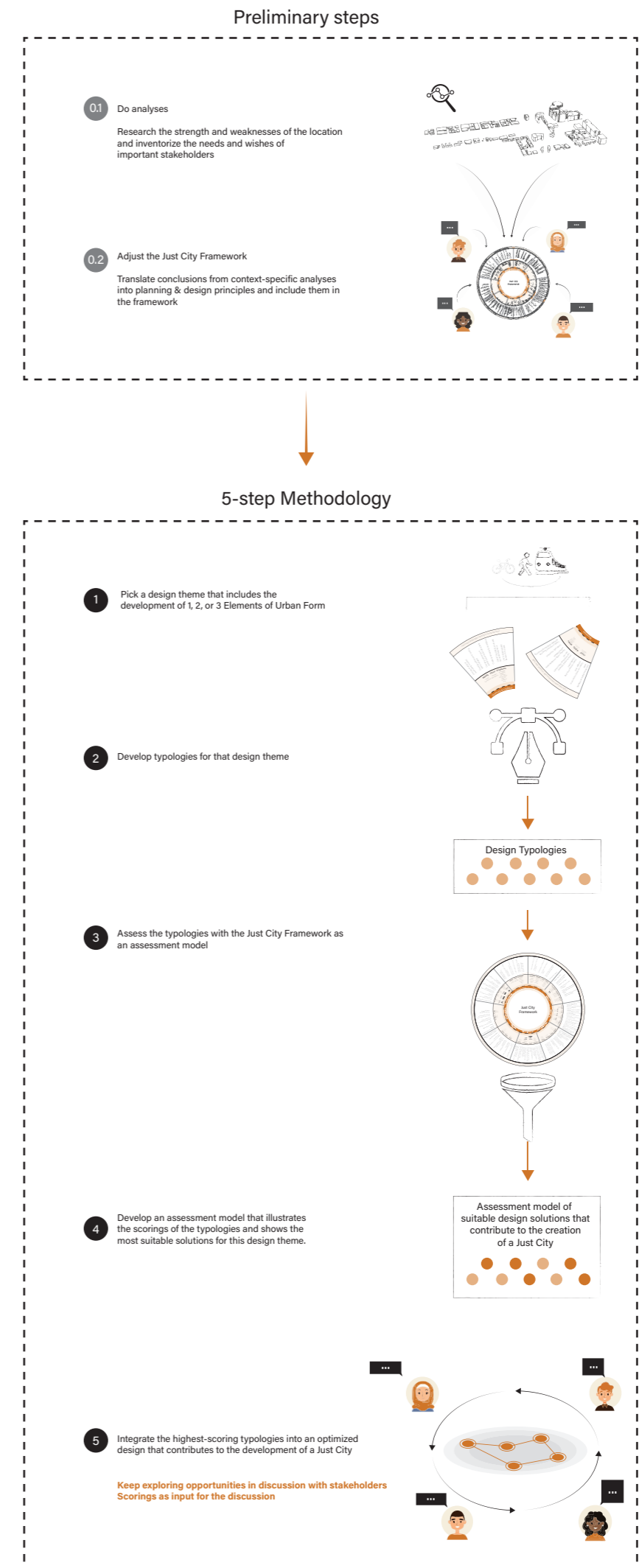

Preliminary steps

0.1   Do analyses
Research the strength and weaknesses of the location and inventorize the needs and wishes of important stakeholders

0.2   Adjust the Just City Framework
Translate conclusions from context-specific analyses into planning & design principles and include them in the framework

5-step Methodology

1   Pick a design theme that includes the development of 1, 2, or 3 Elements of Urban Form

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Assessment model of suitable design solutions that contribute to the creation of a Just City

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Keep exploring opportunities in discussion with stakeholders
Scorings as input for the discussion